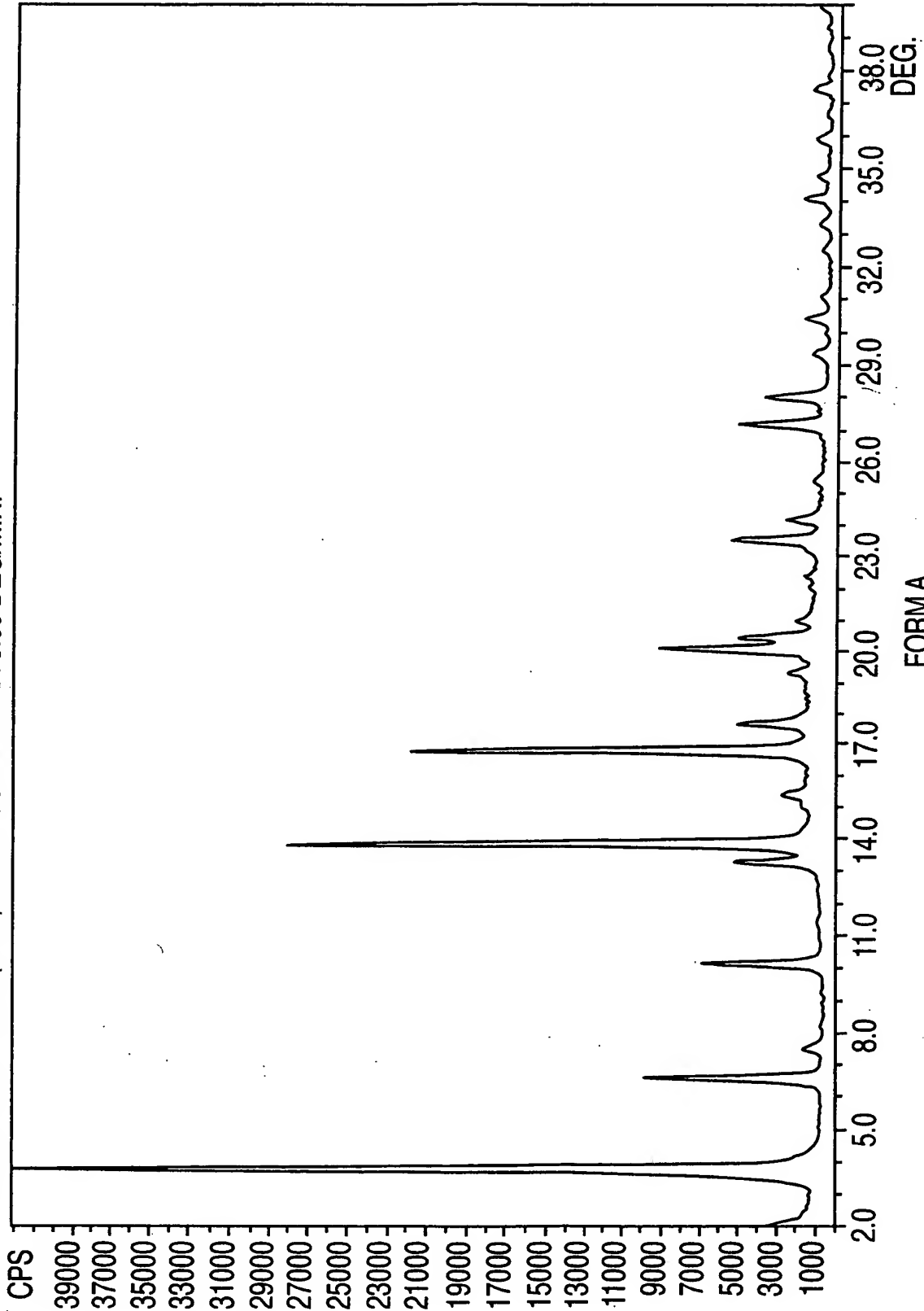




STEP : 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.



FORM A
FIG. 1

2/64

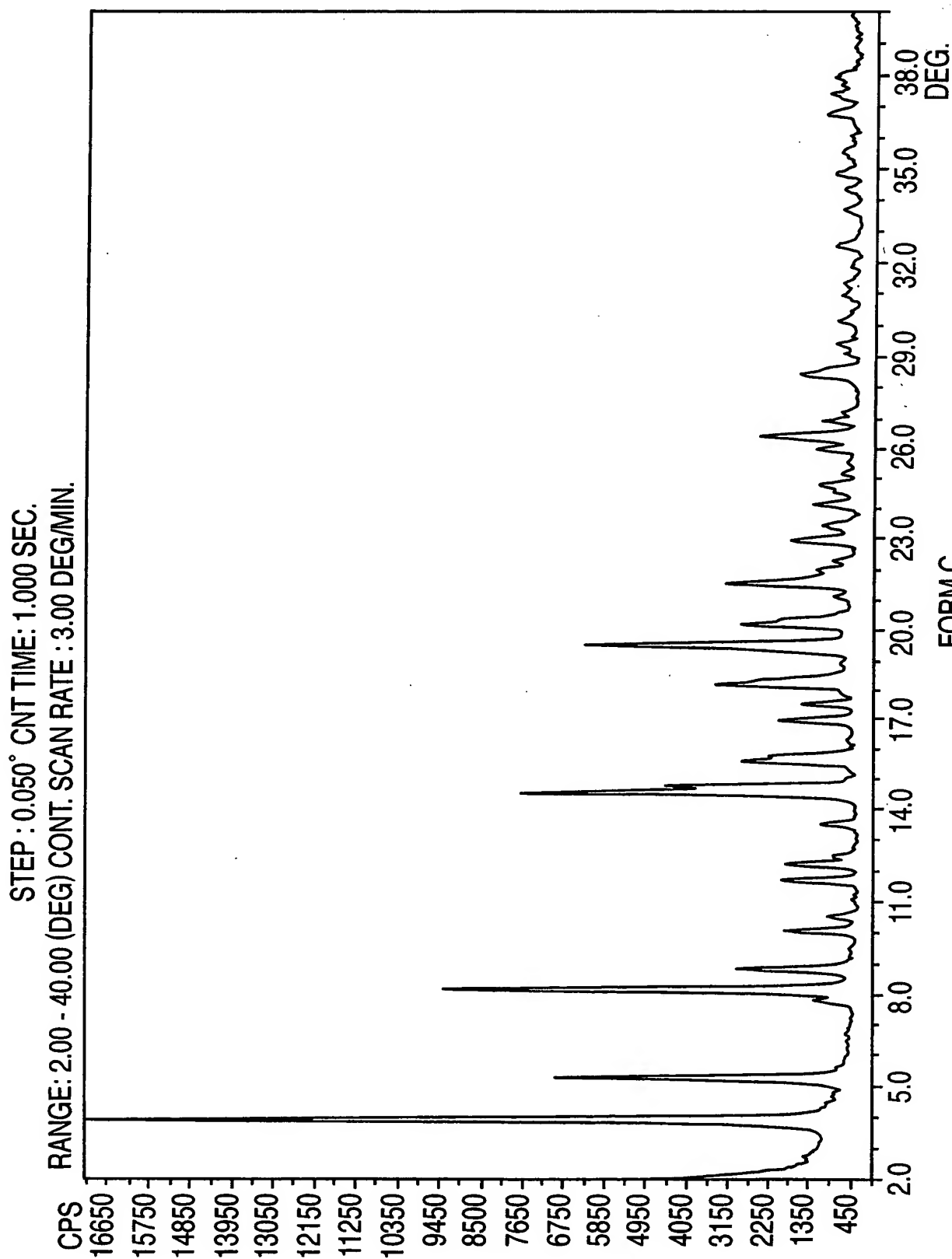


FIG. 2

3/64

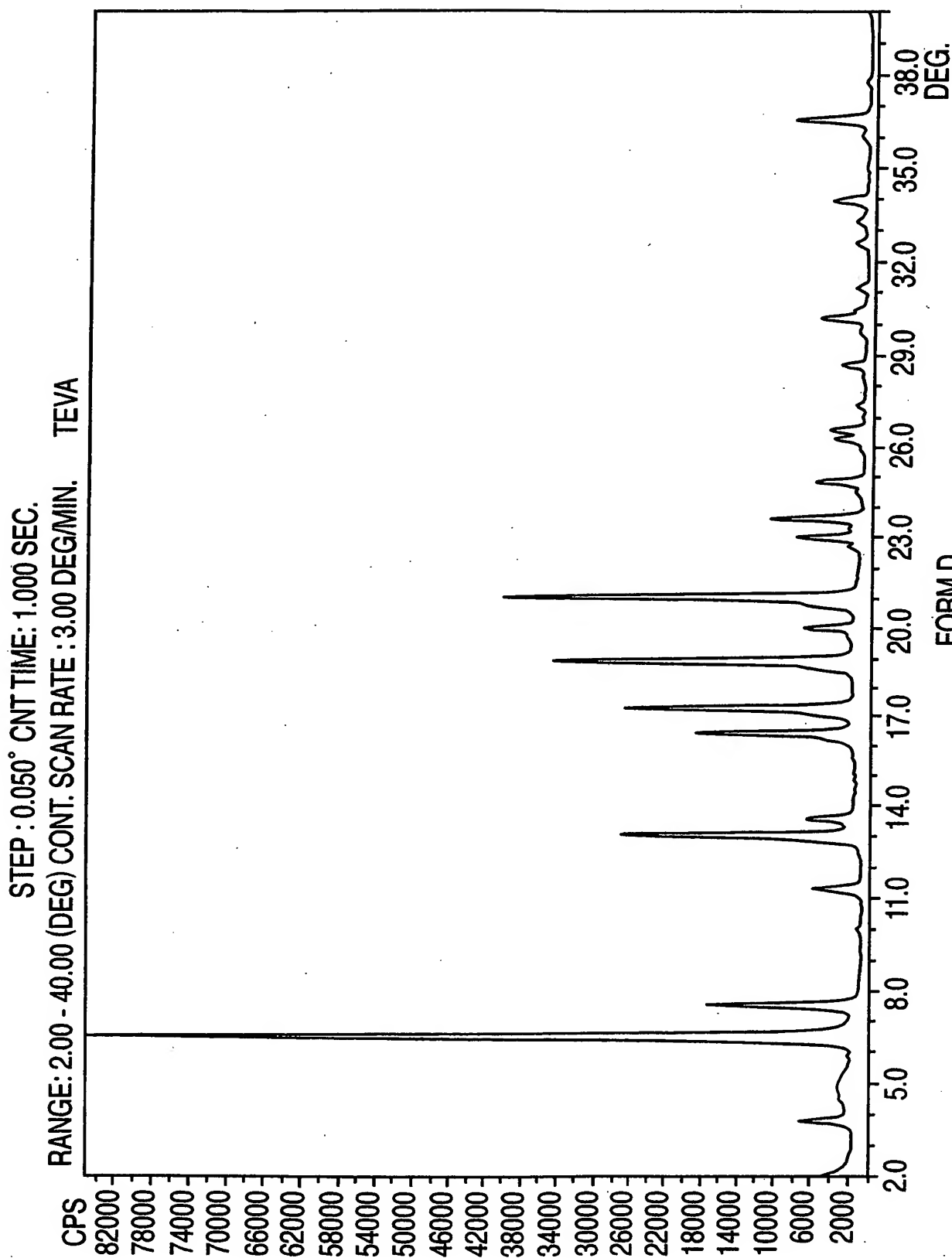


FIG. 3

4/64

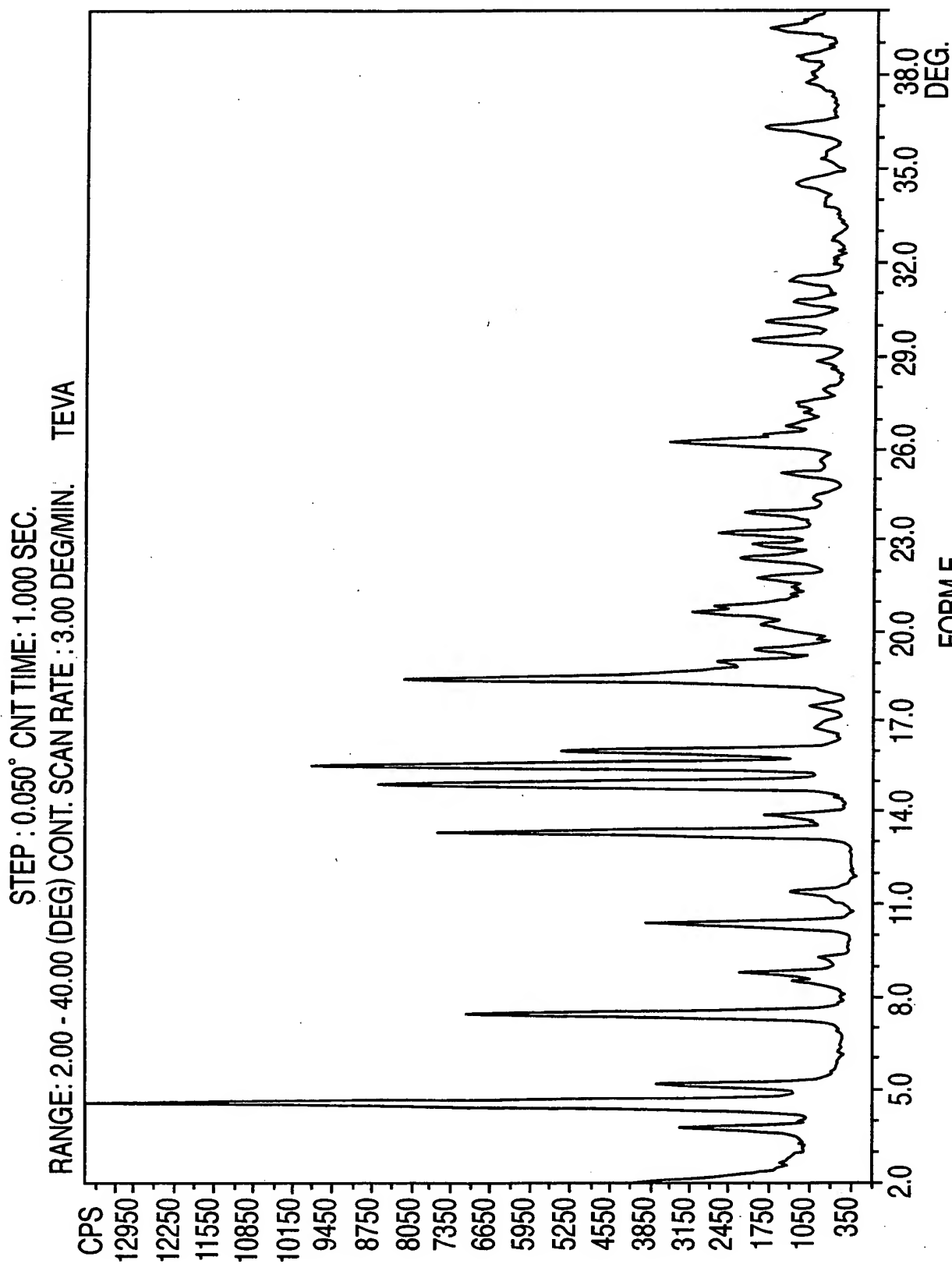


FIG. 4

5/64

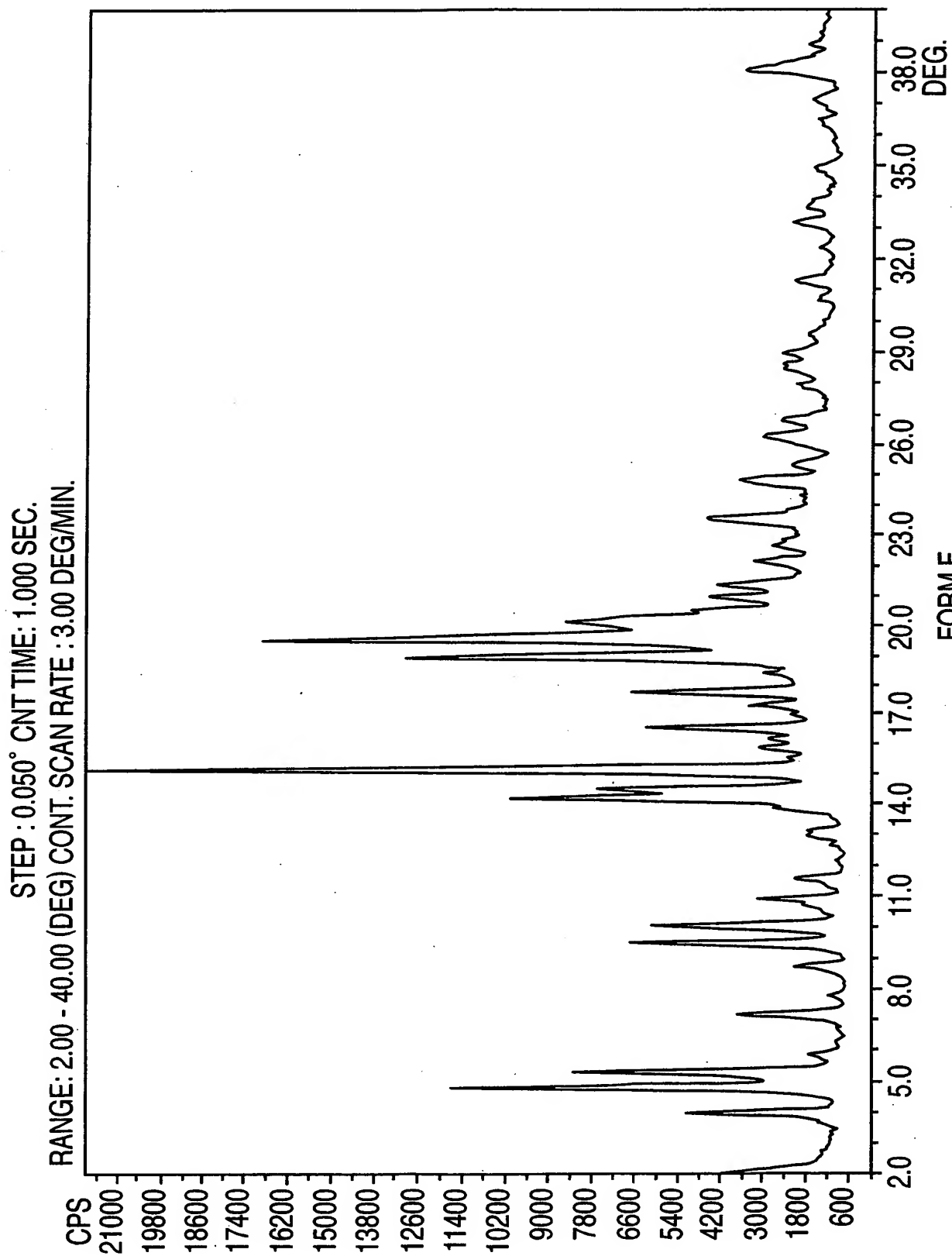


FIG. 5

6/64

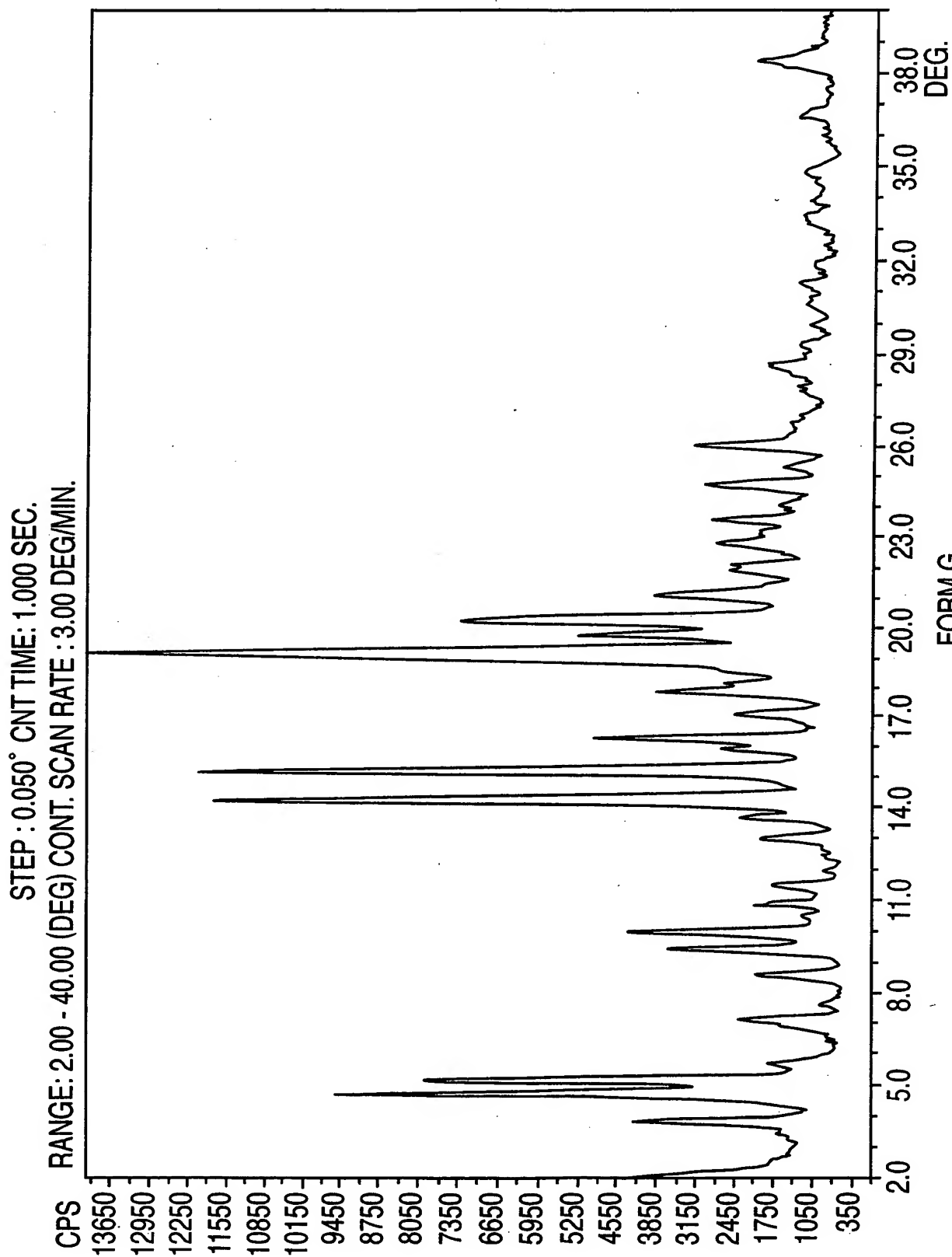


FIG. 6

7/64

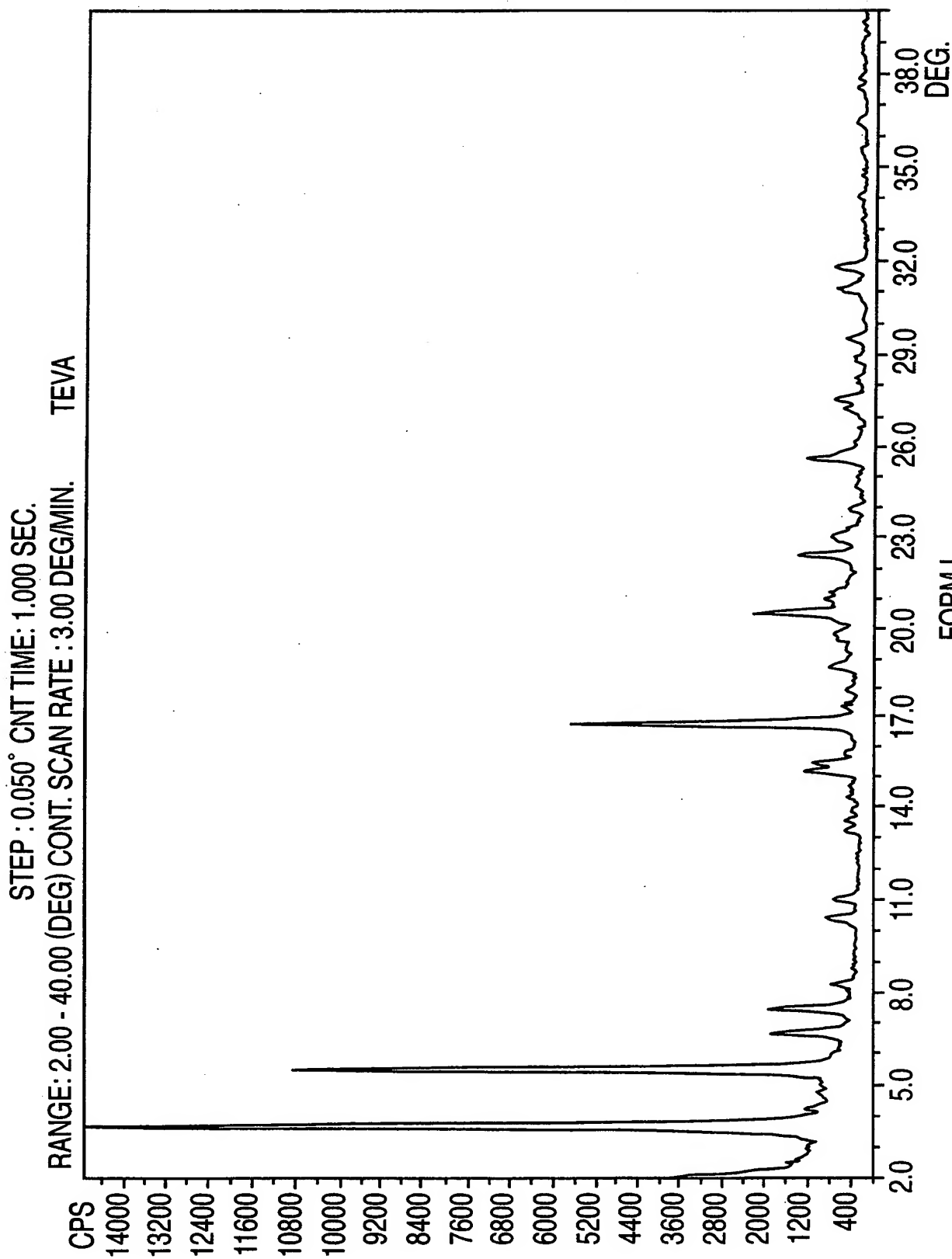
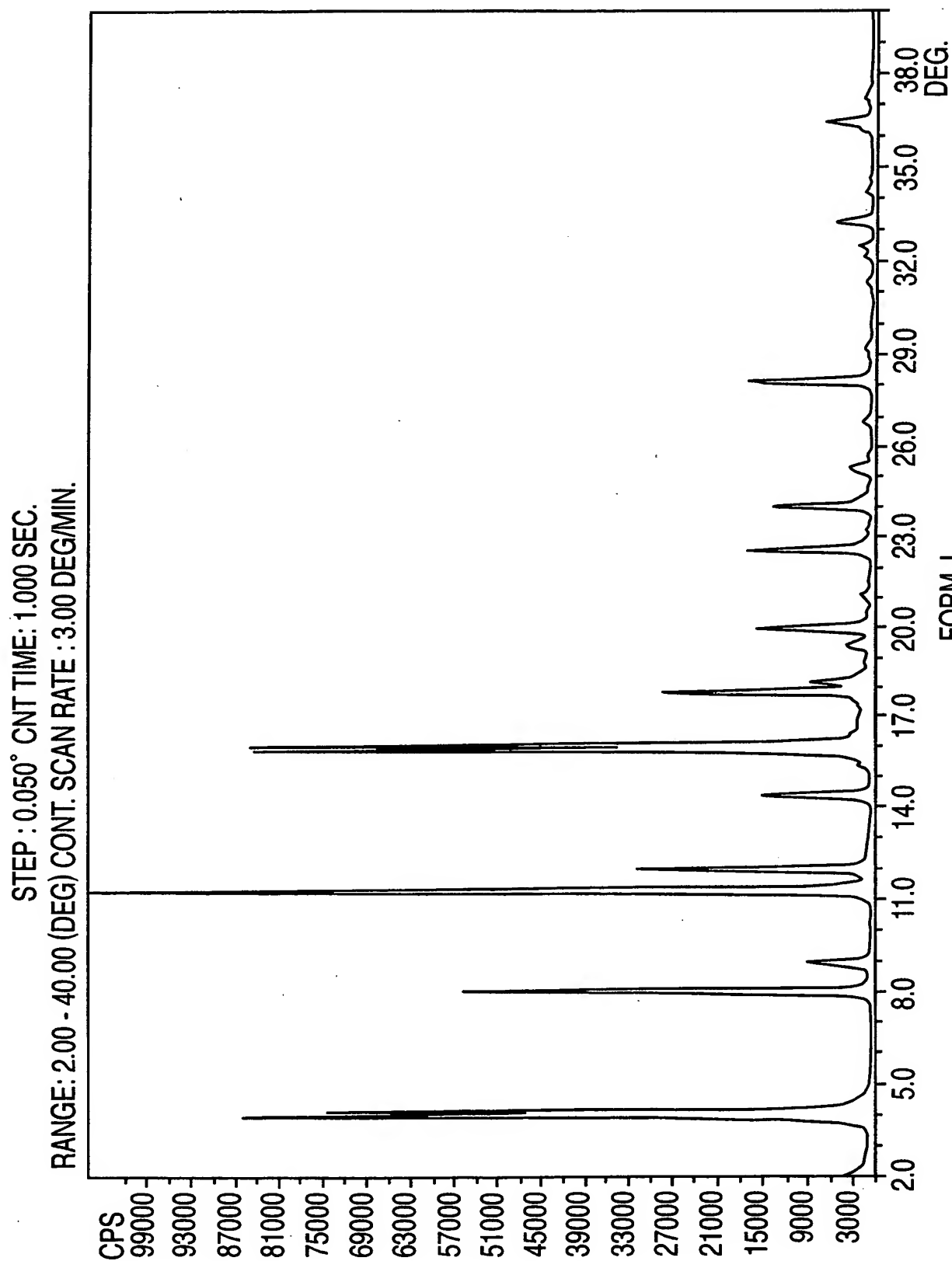


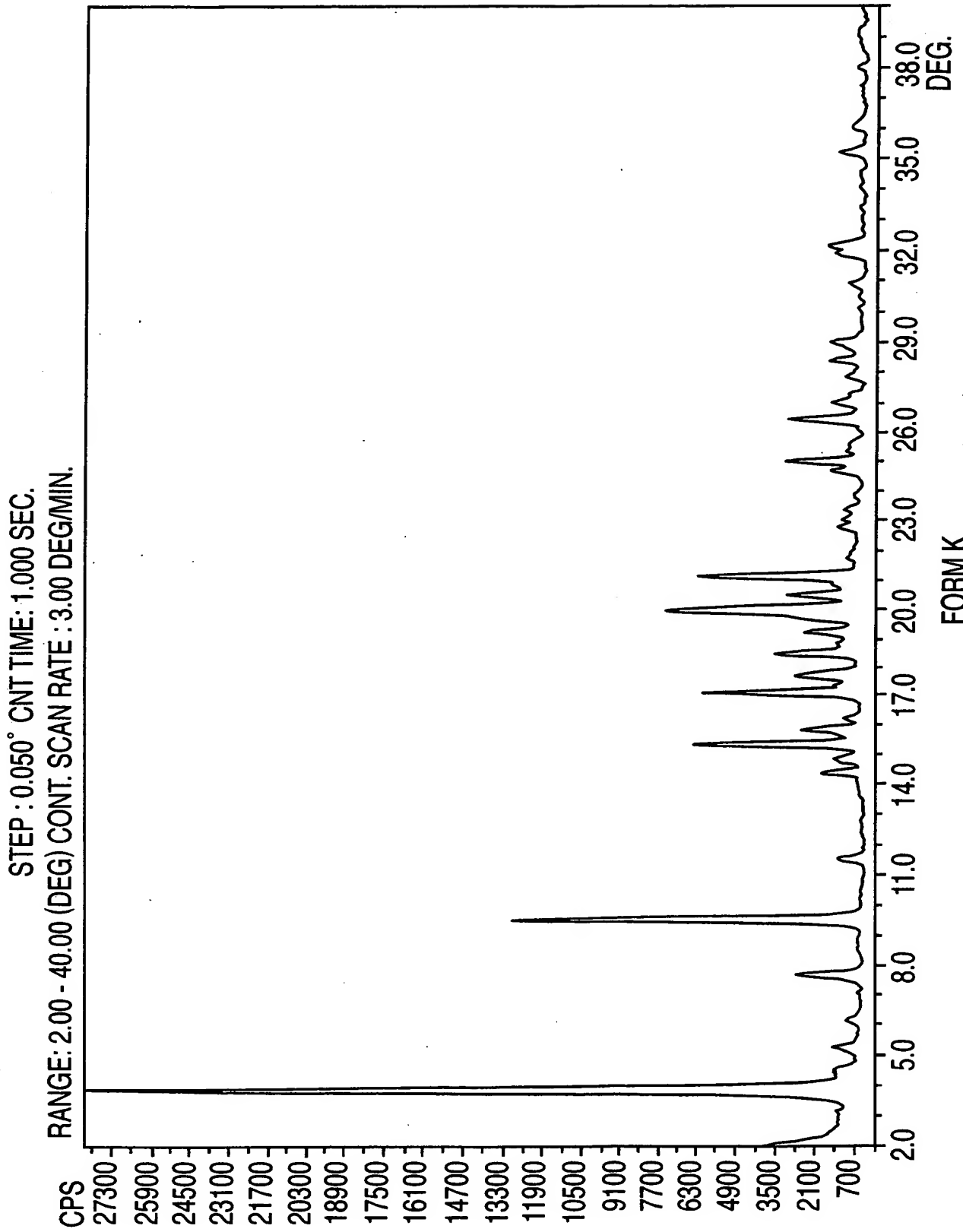
FIG. 7

8/64



FORM J
FIG. 8

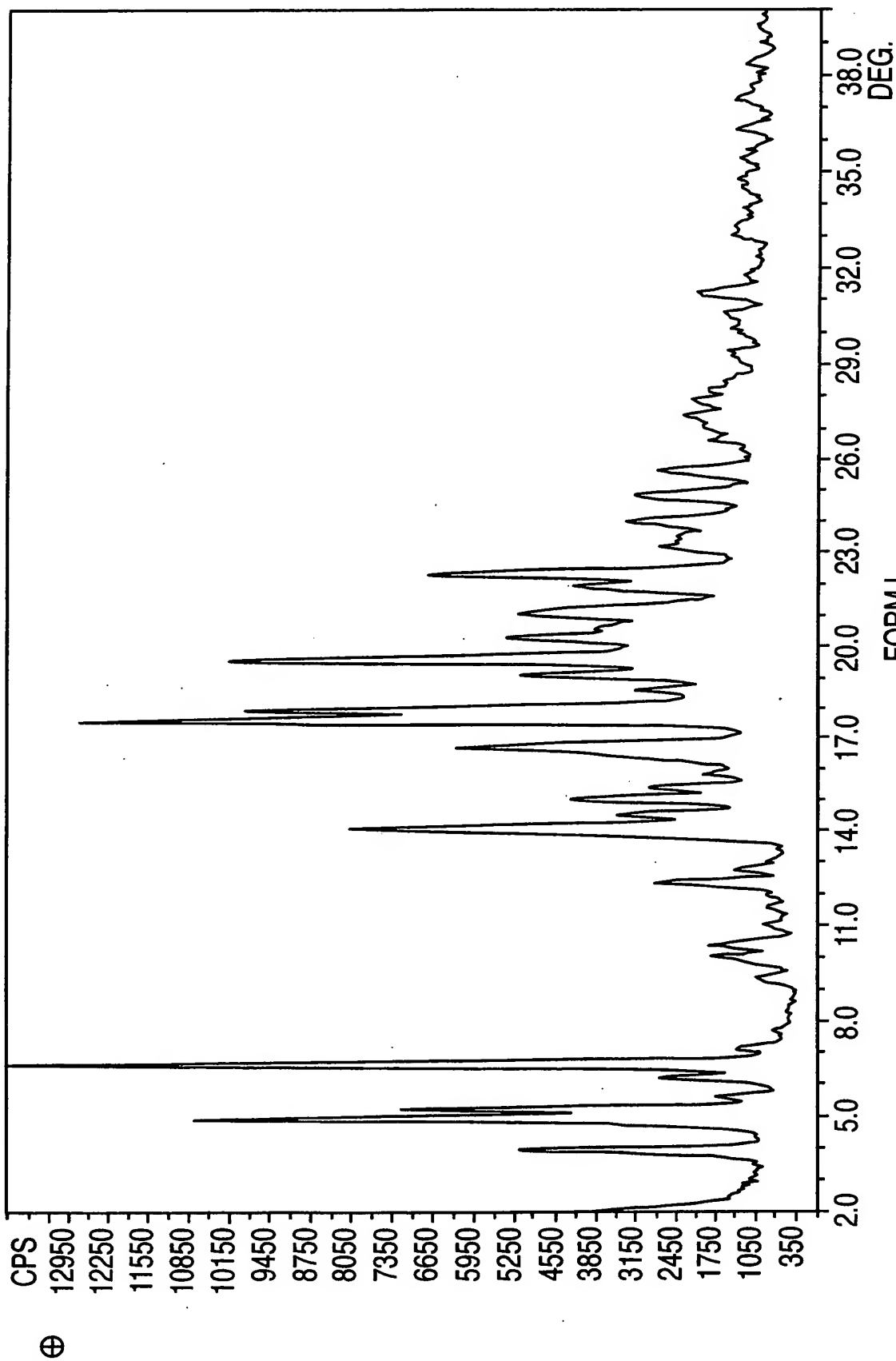
9/64



FORM K
FIG. 9

10/64

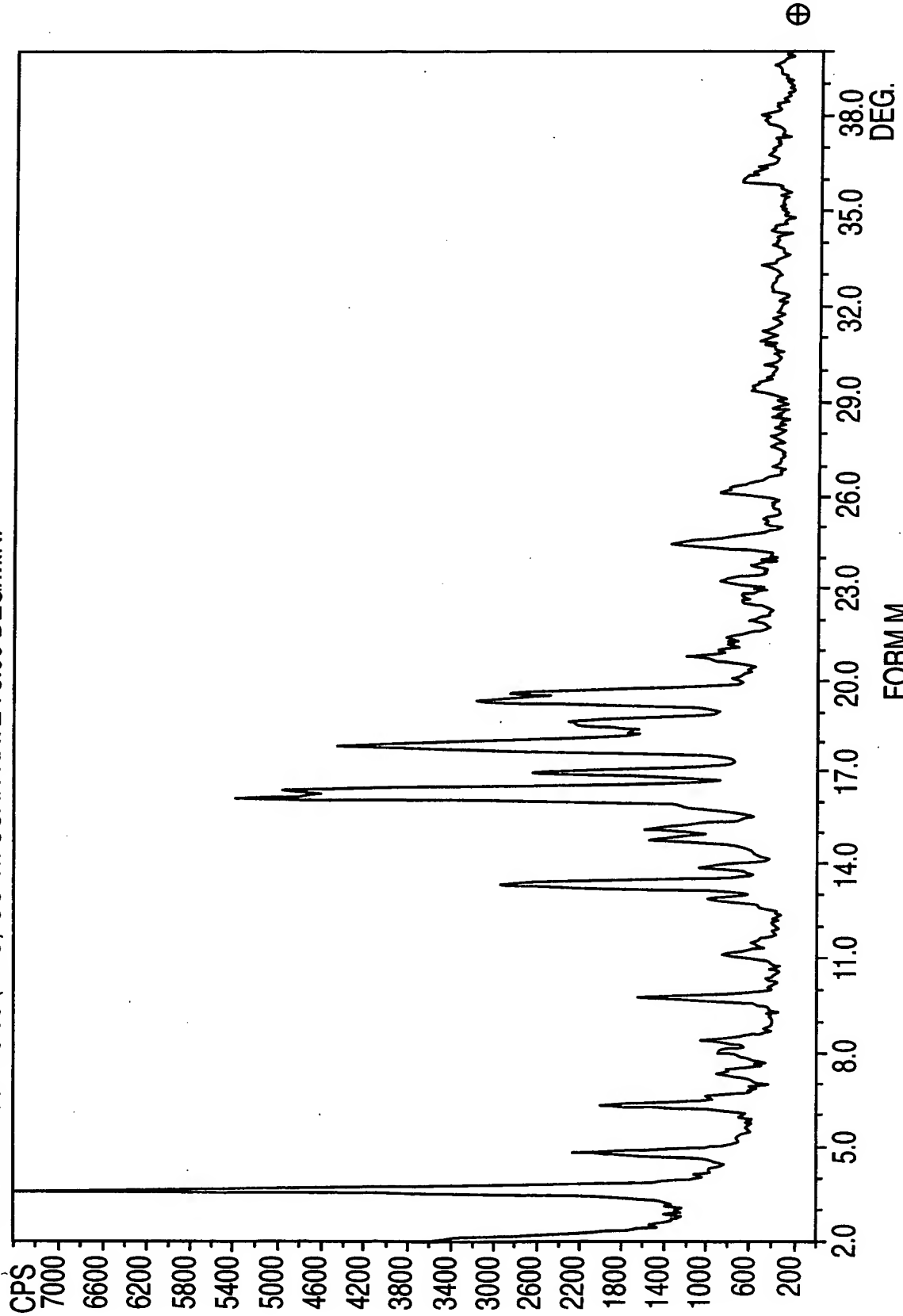
STEP : 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.



FORM L
FIG. 10

11/64

STEP : 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.



FORM M

FIG. 11

12/64

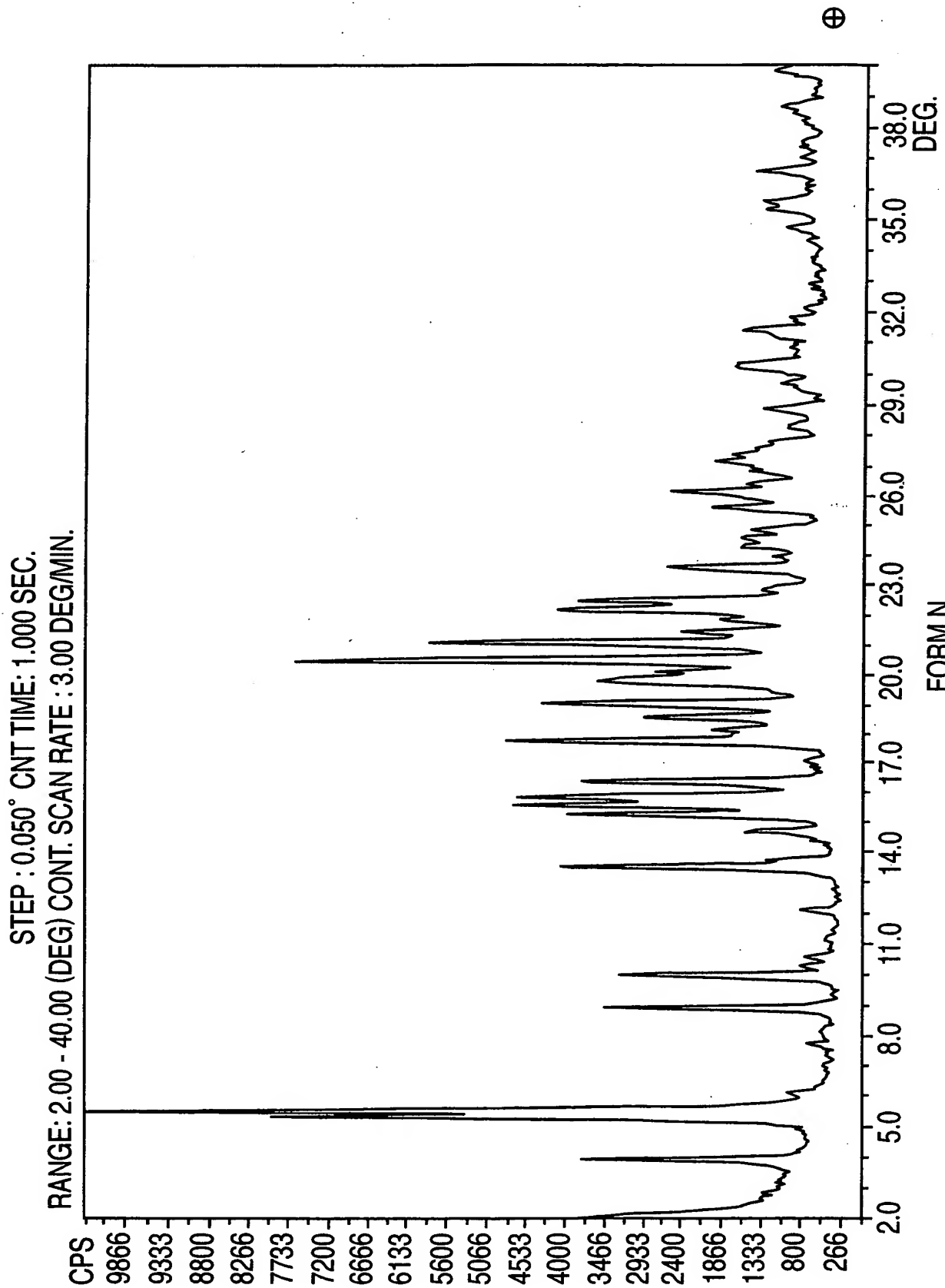


FIG. 12

13/64

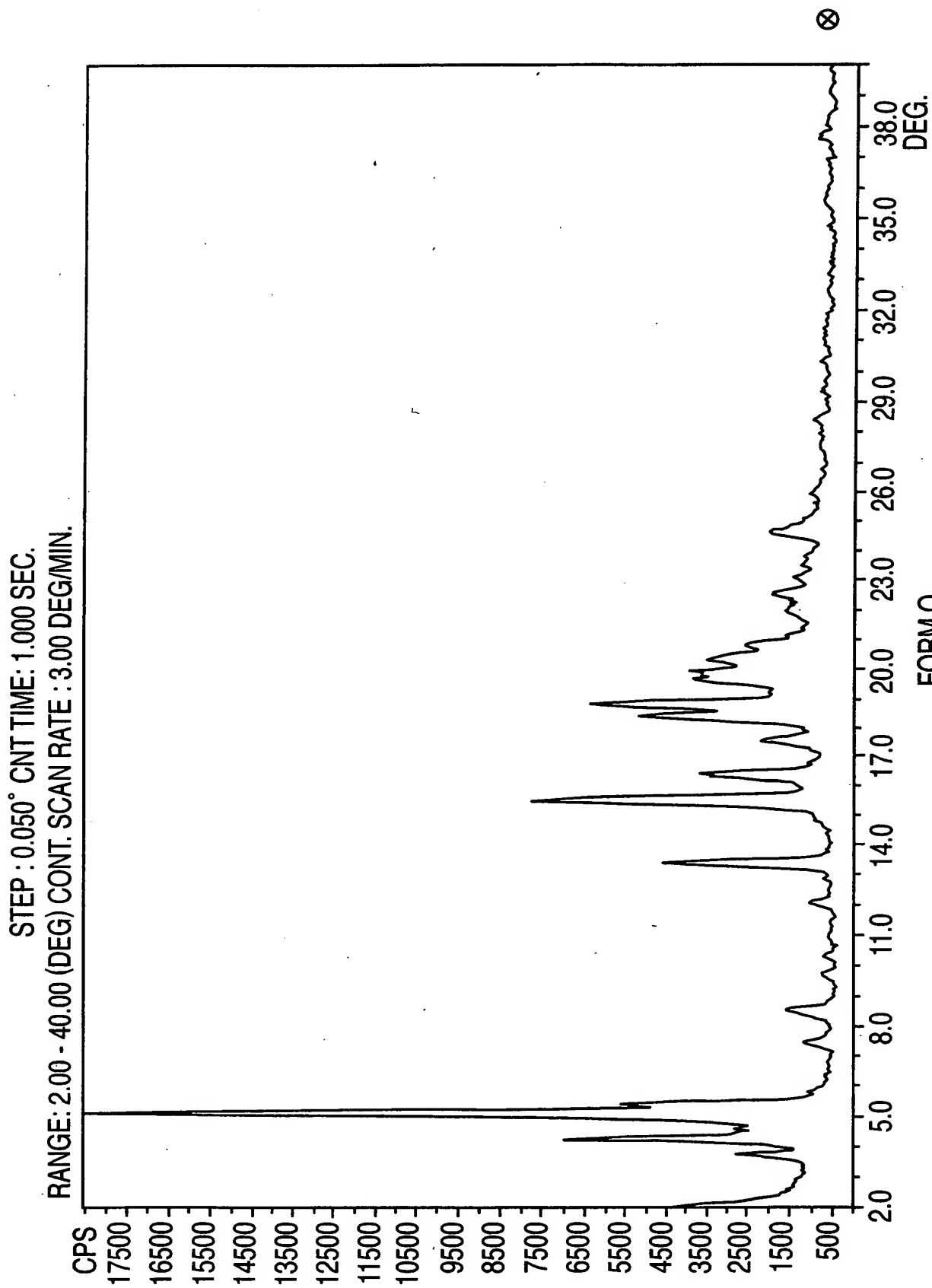
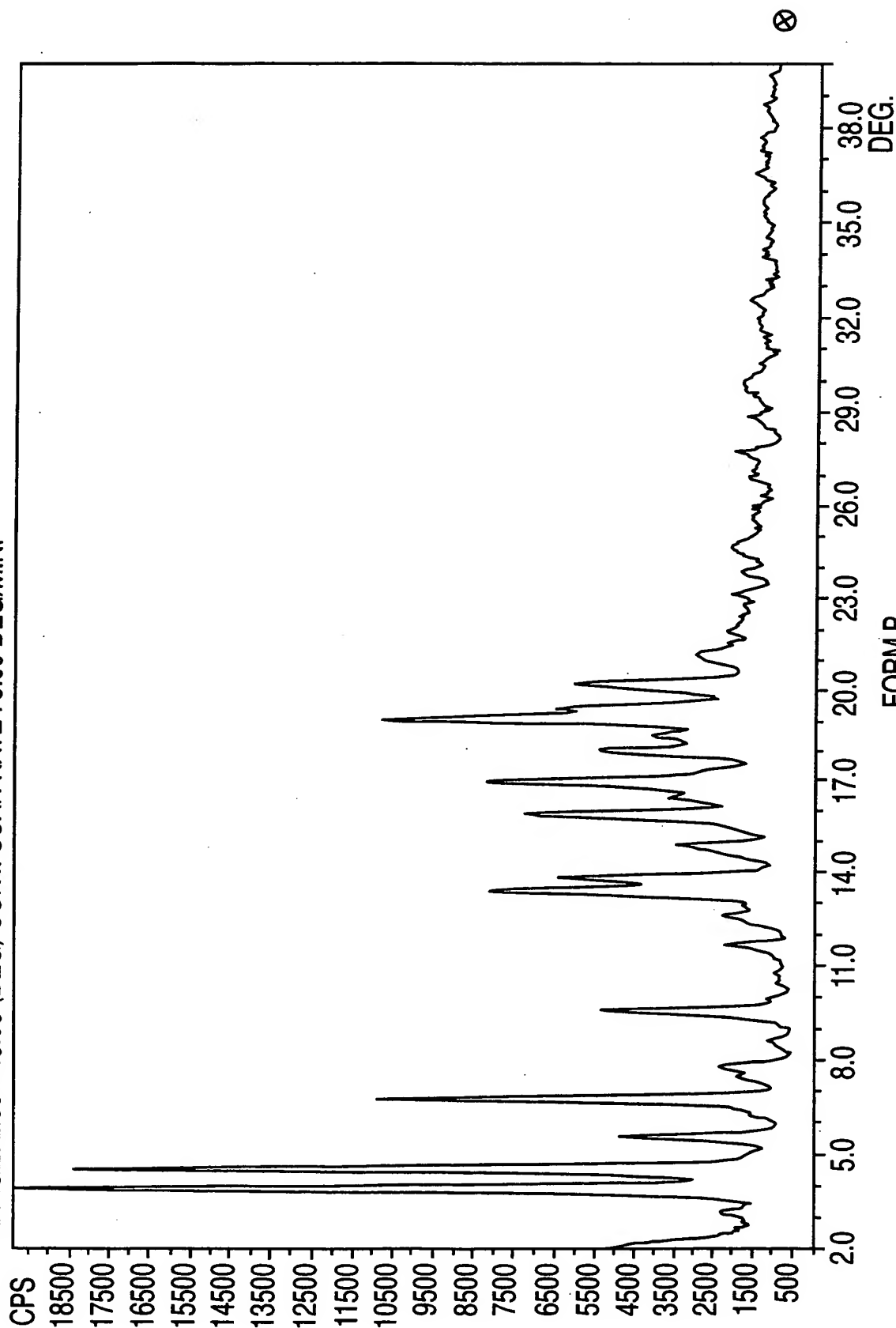


FIG. 13

14/64

STEP : 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.



FORM P
FIG. 14

15/64

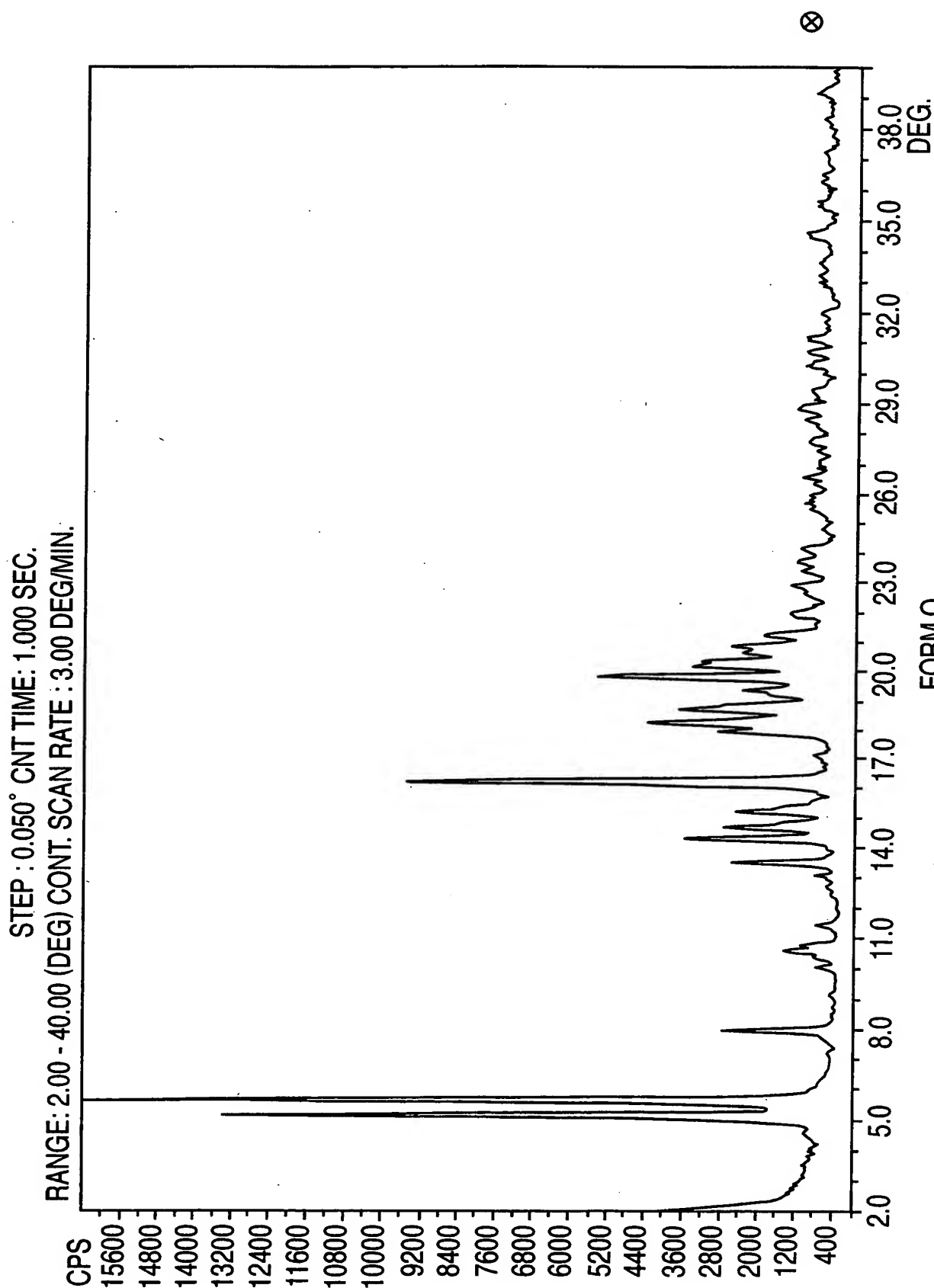
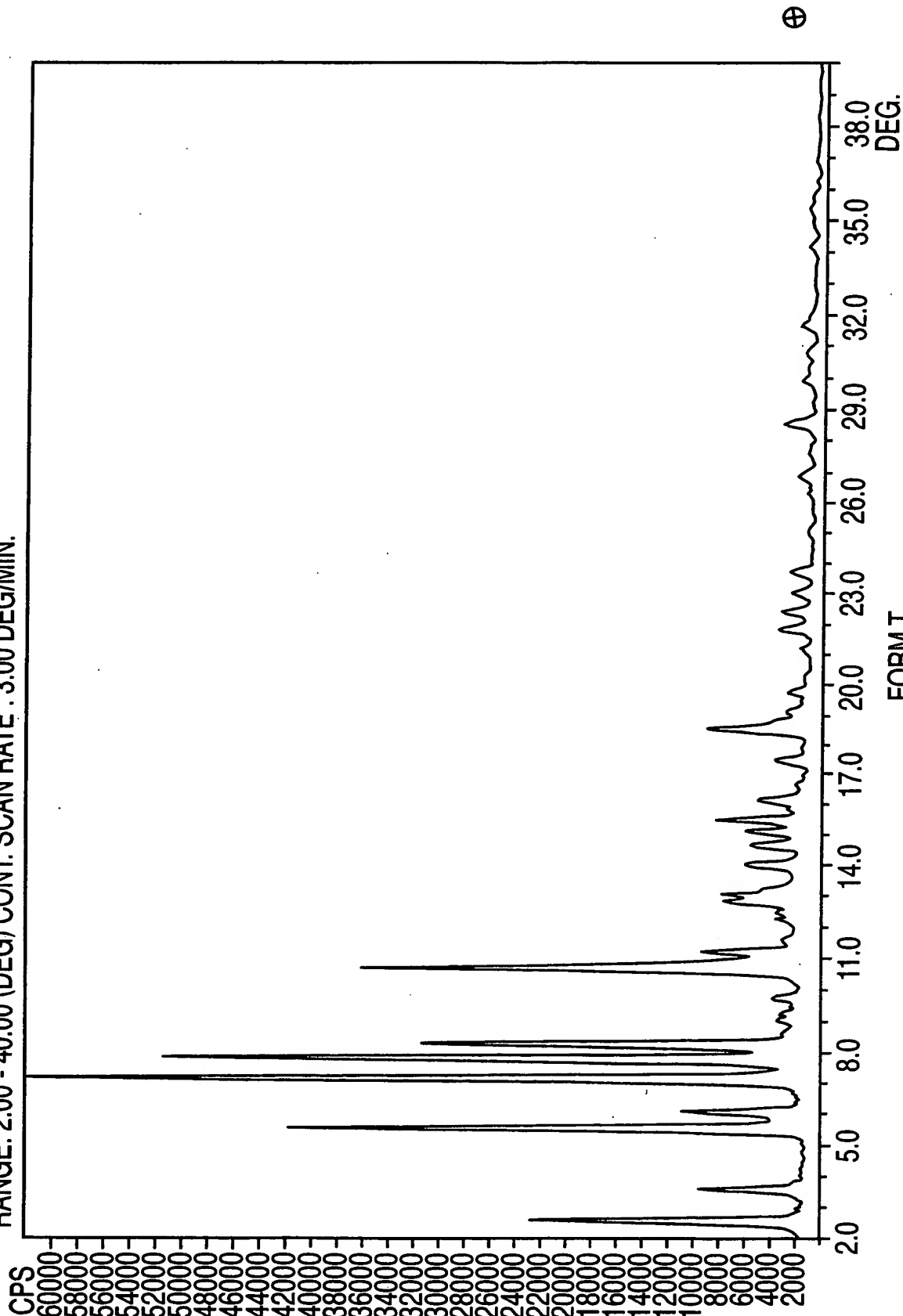


FIG. 15

16/64

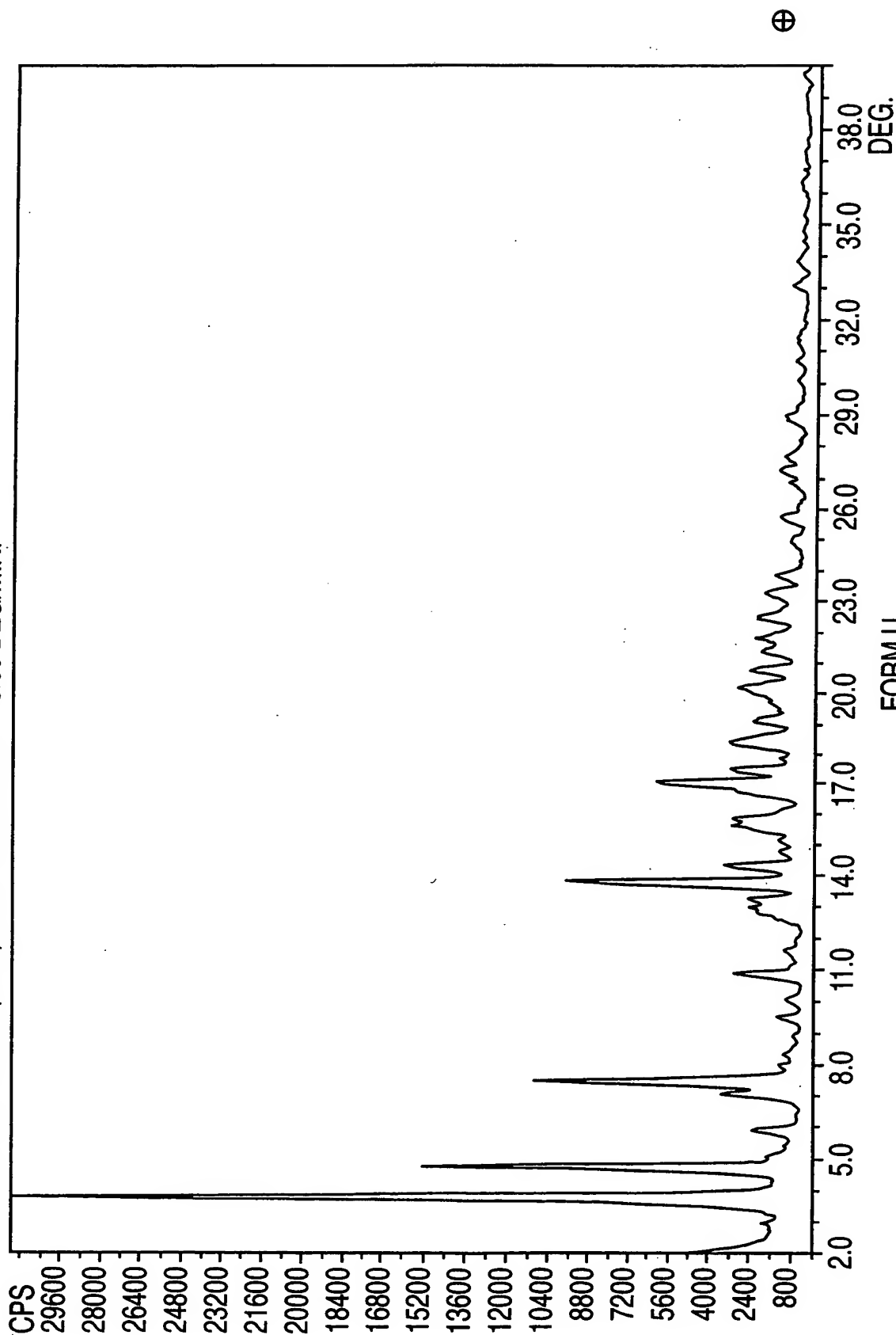
STEP: 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE: 3.00 DEG/MIN.



FORM T
FIG. 16

17/64

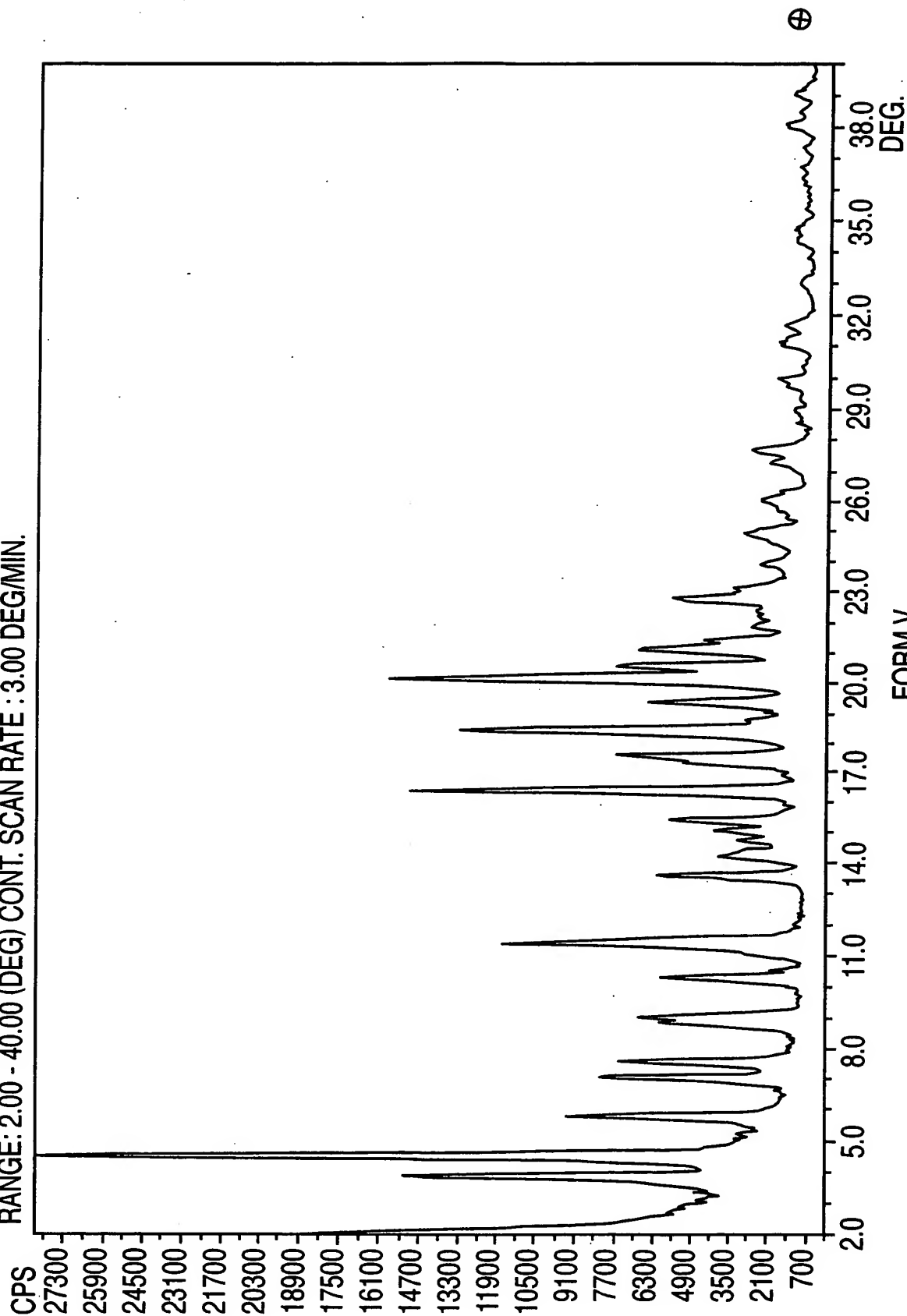
STEP: 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE: 3.00 DEG/MIN.



FORM U
FIG. 17

18/64

STEP : 0.050° CNT TIME: 1.000 SEC.
RANGE: 2.00 - 40.00 (DEG) CONT. SCAN RATE : 3.00 DEG/MIN.



FORM V
FIG. 18

19/64

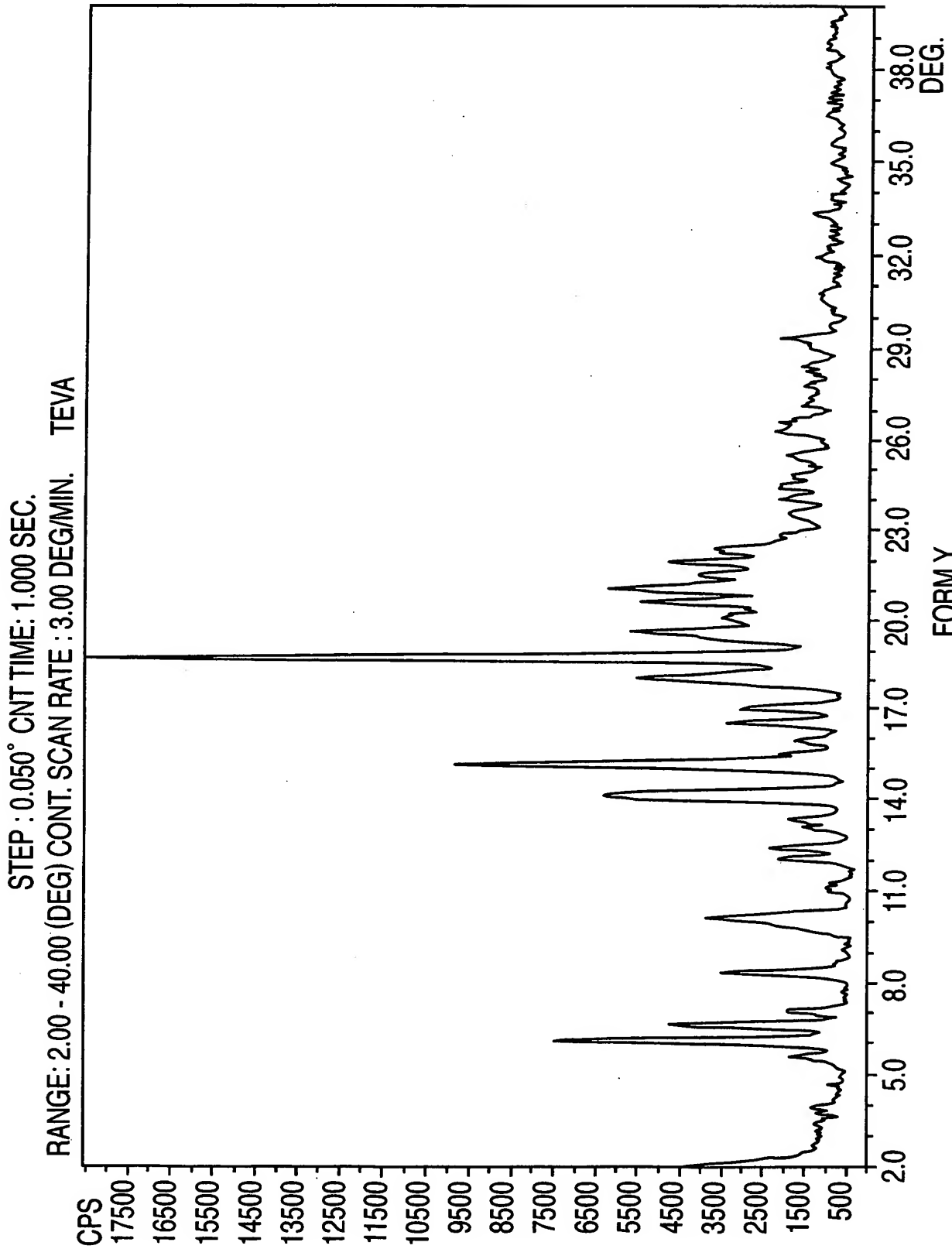
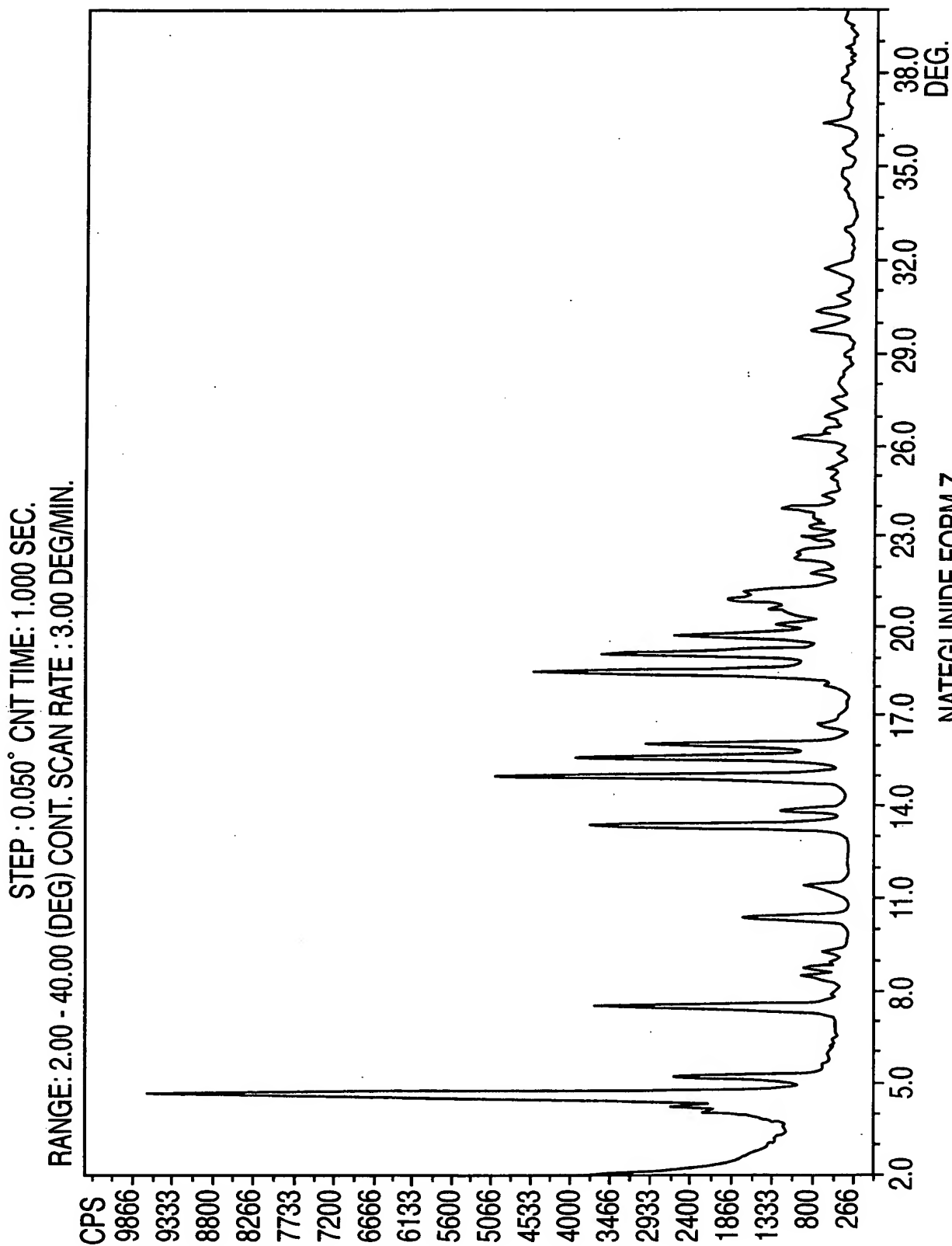


FIG. 19



NATEGLINIDE FORM Z

FIG. 20

21/64

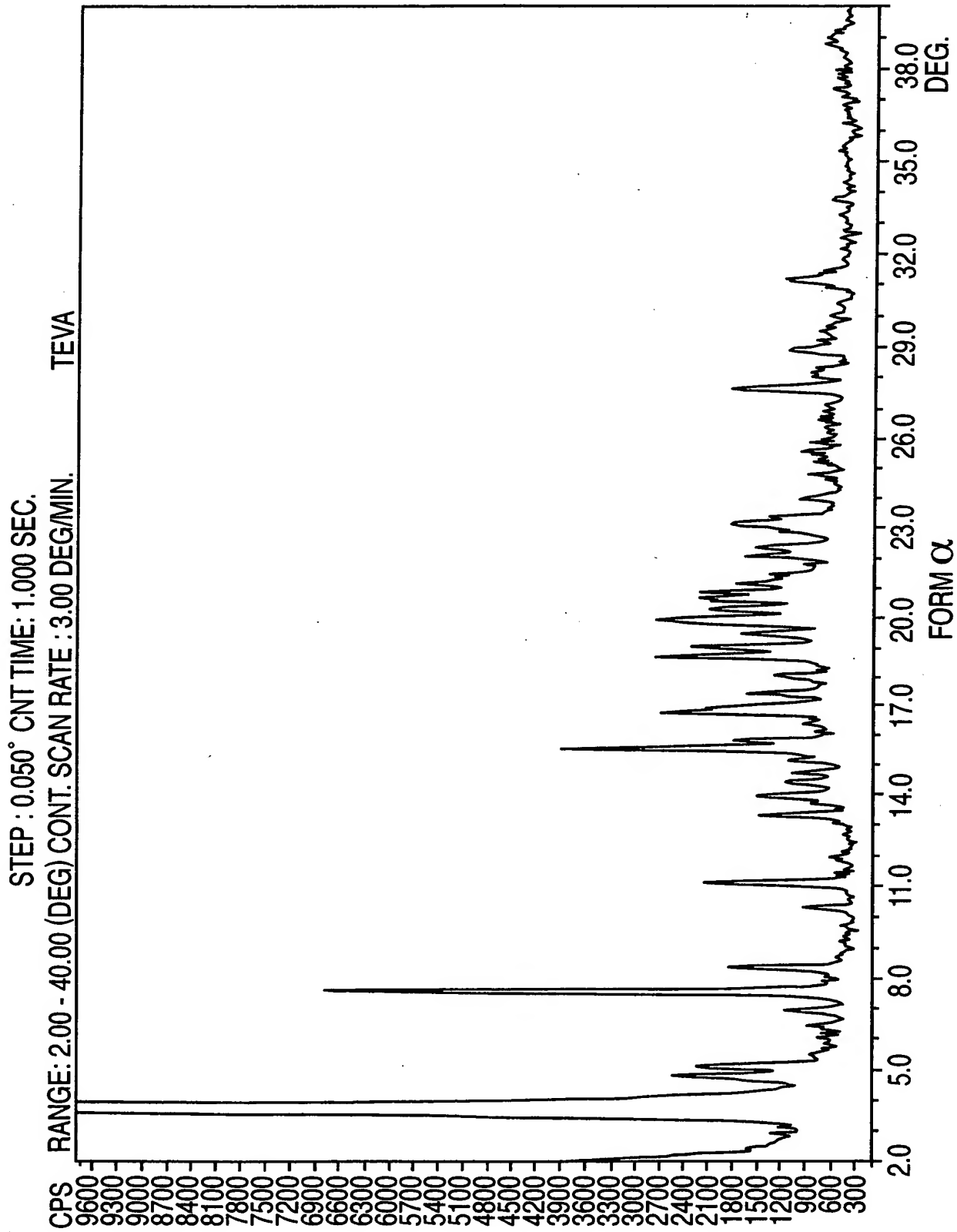
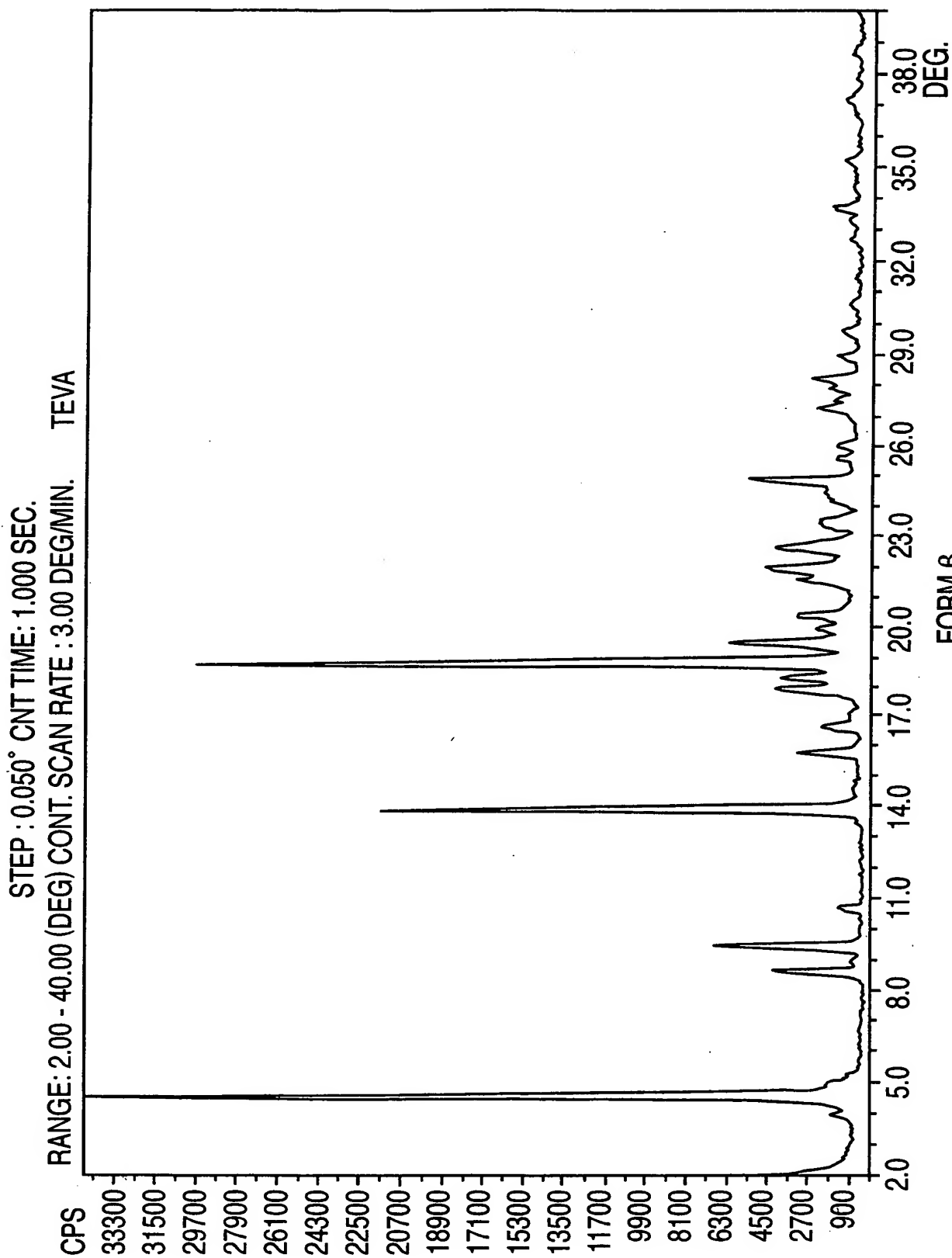


FIG. 21

22/64



FORM β
FIG. 22

23/64

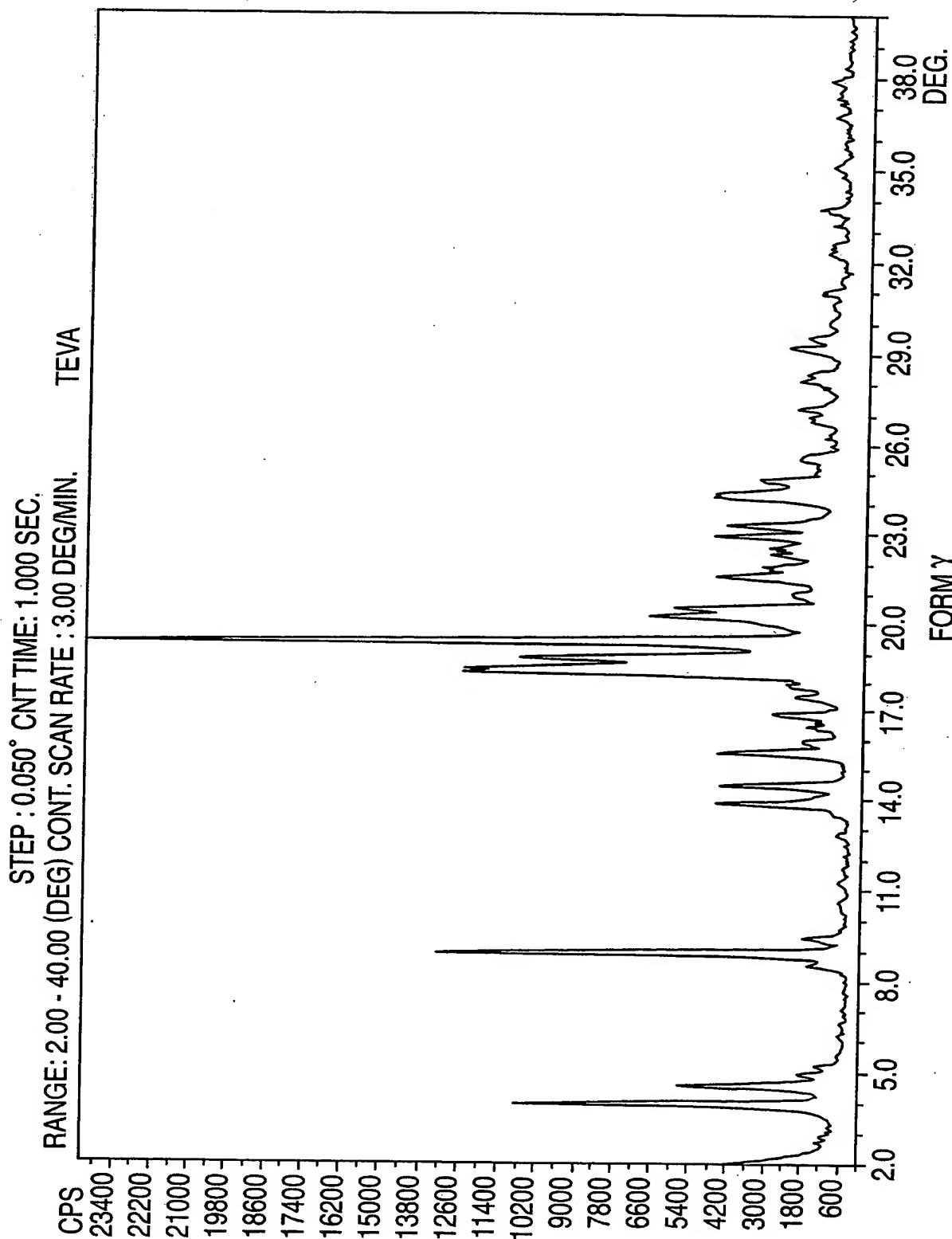


FIG. 23

24/64

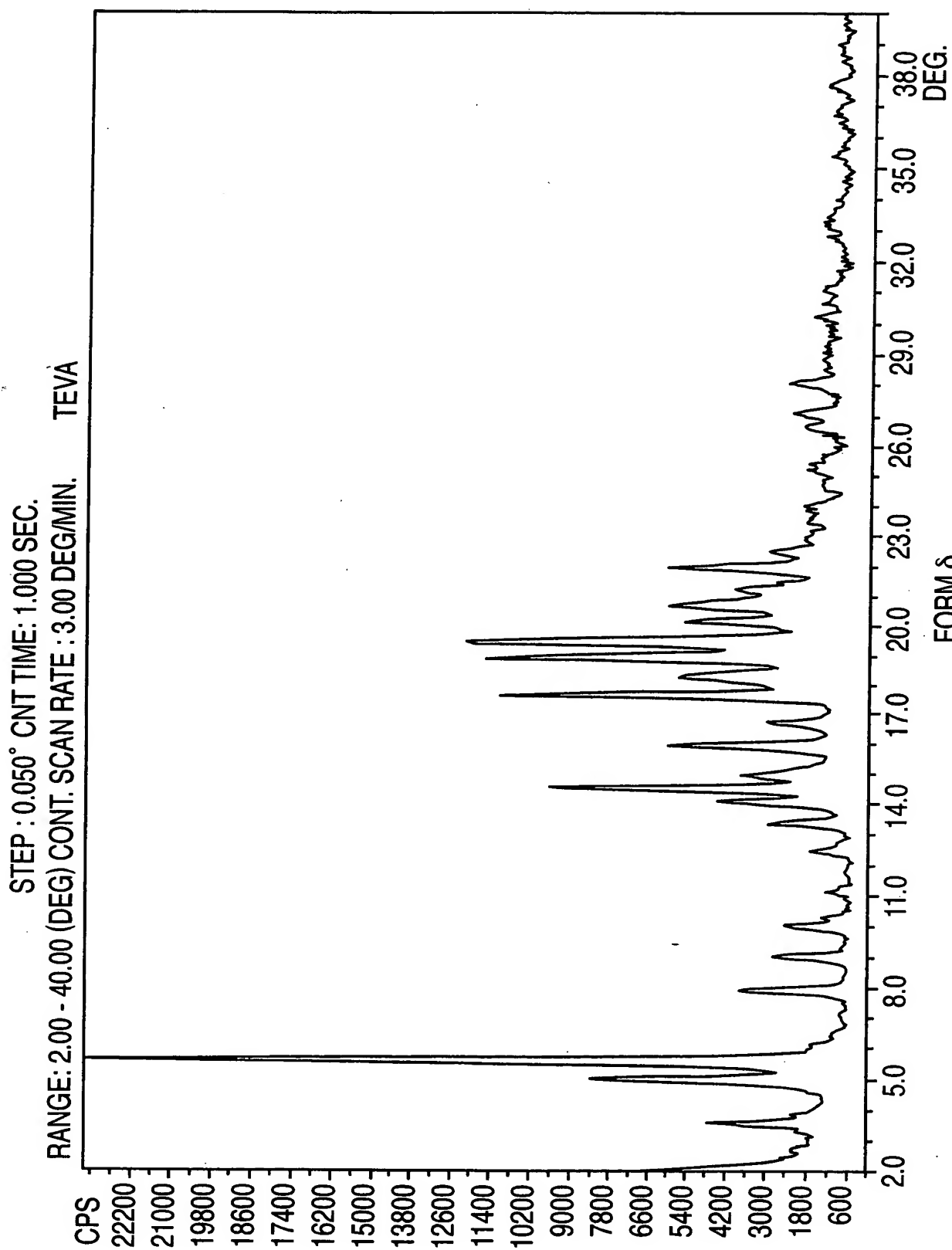


FIG. 24

25/64

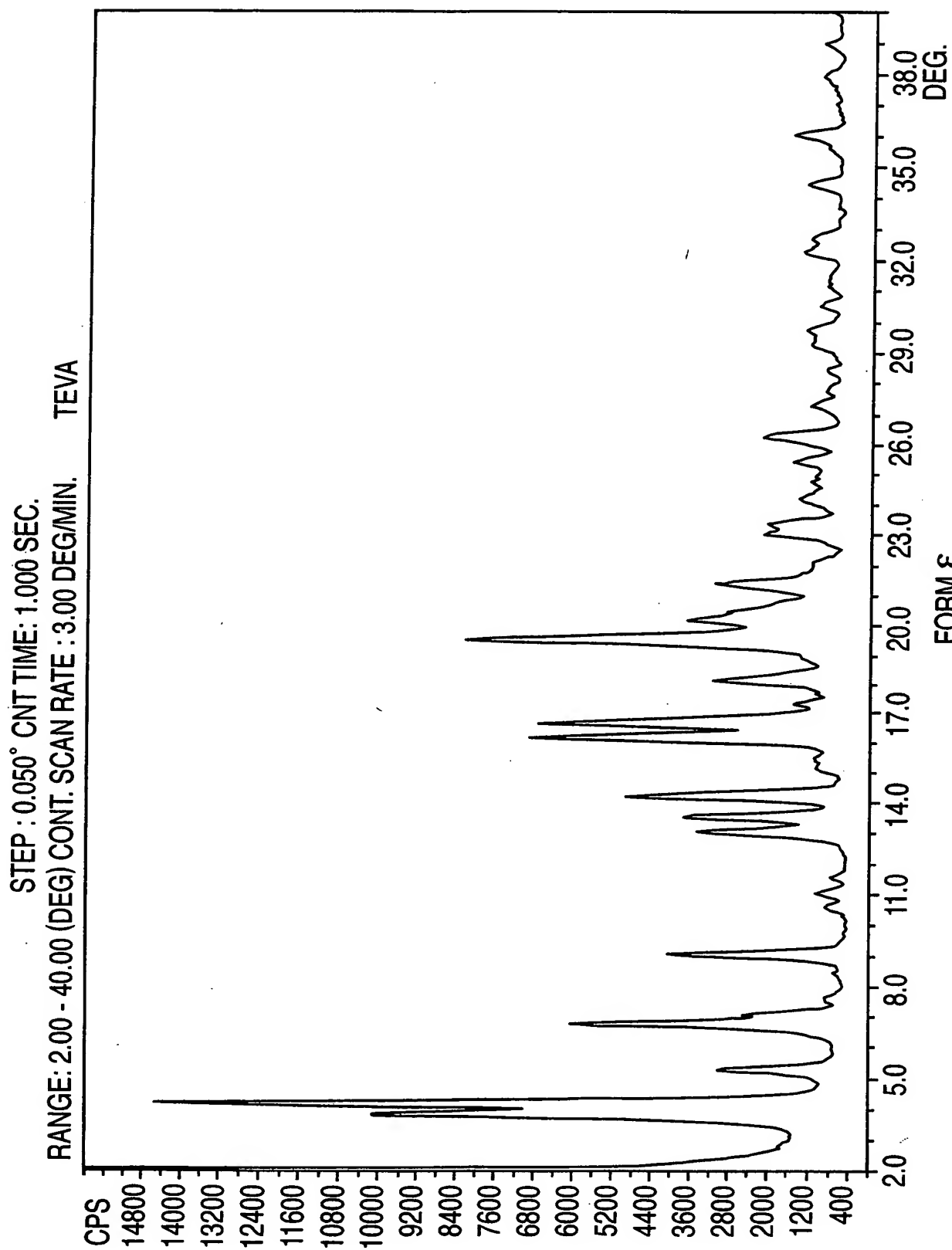


FIG. 25

26/64

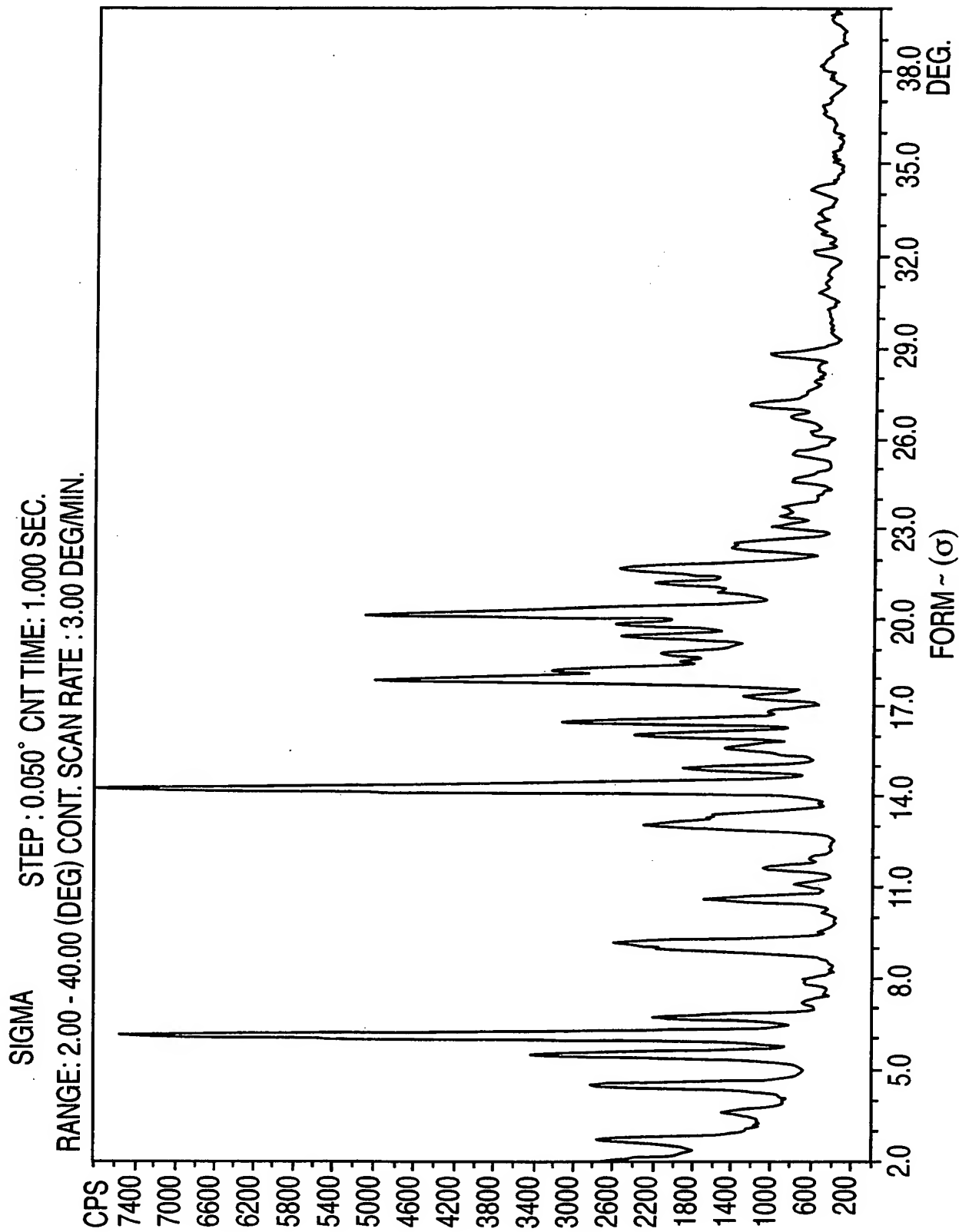
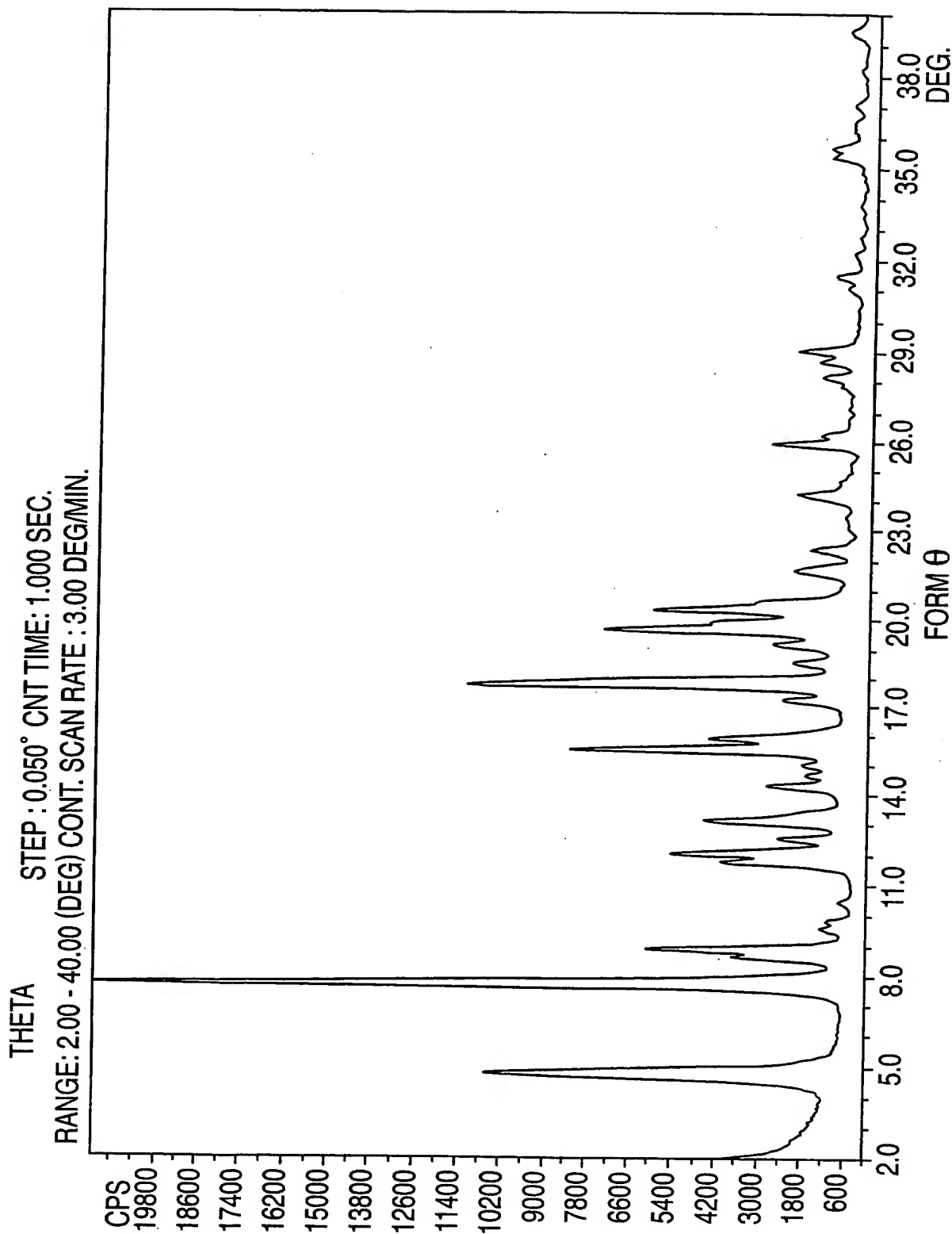


FIG. 26

27/64



FORM θ
FIG. 27

28/64

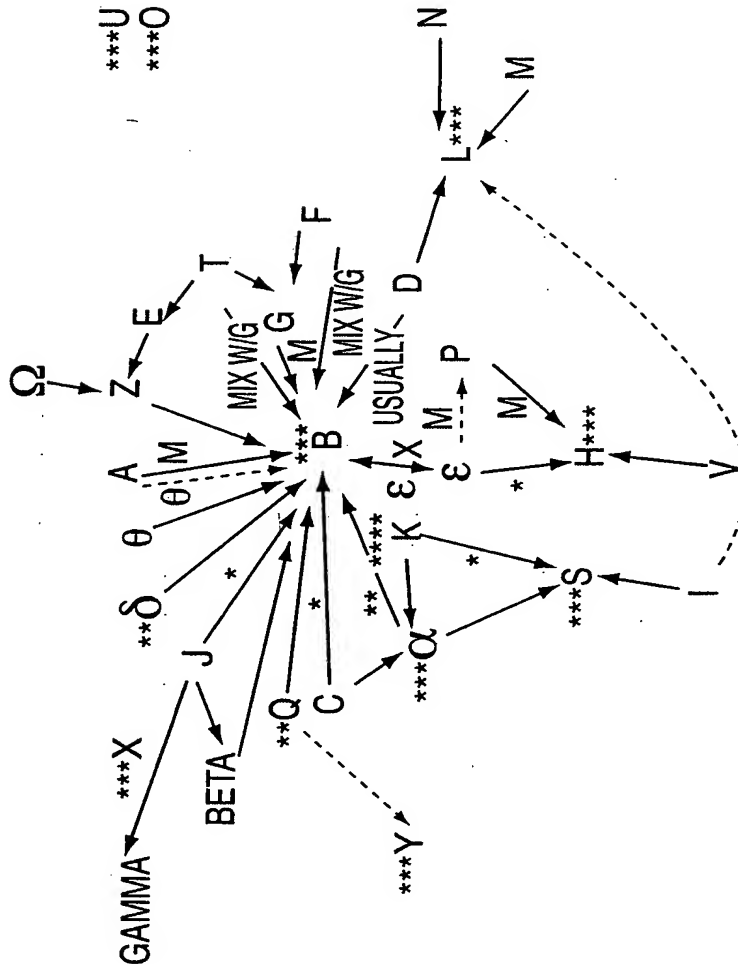
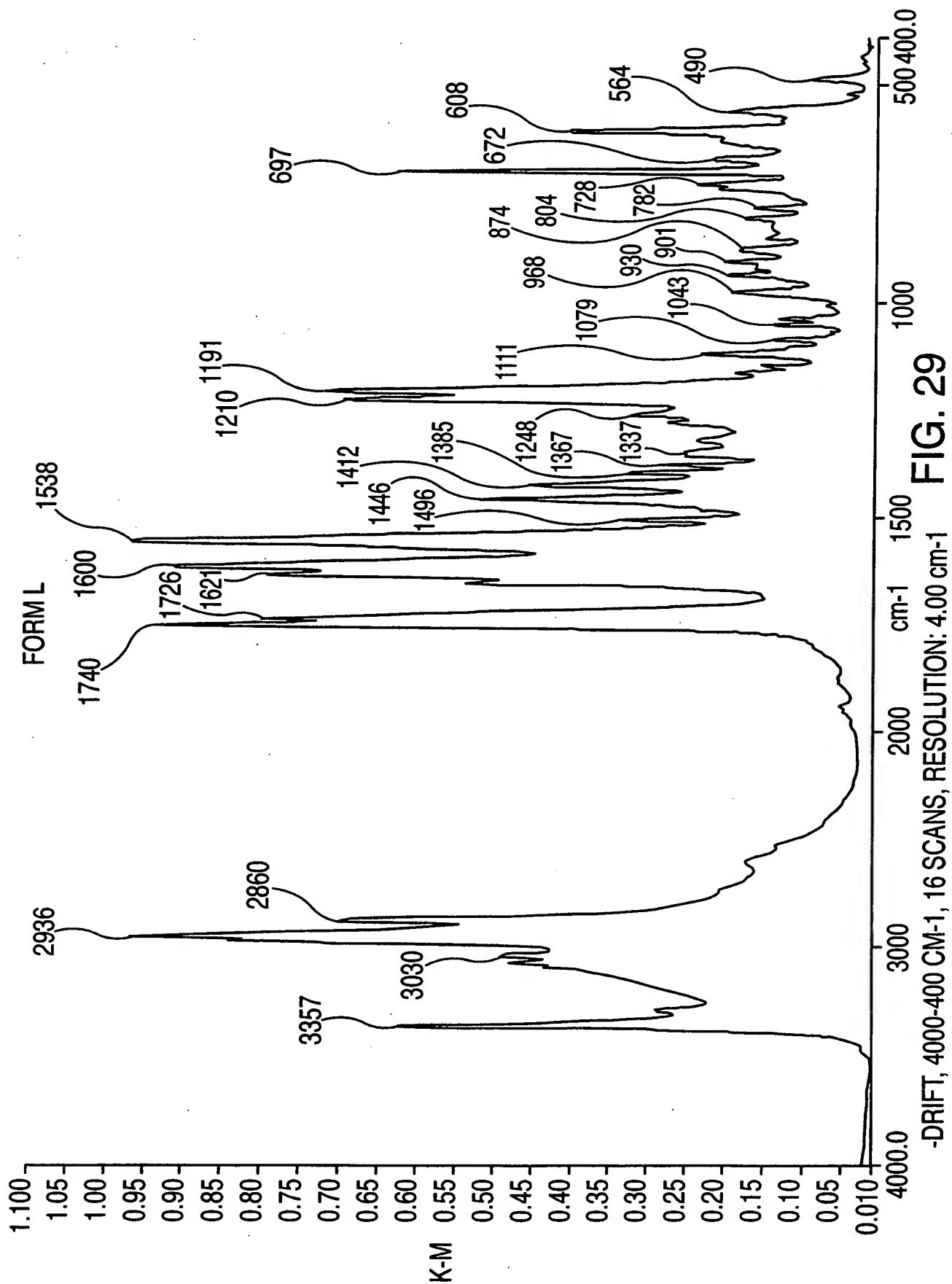
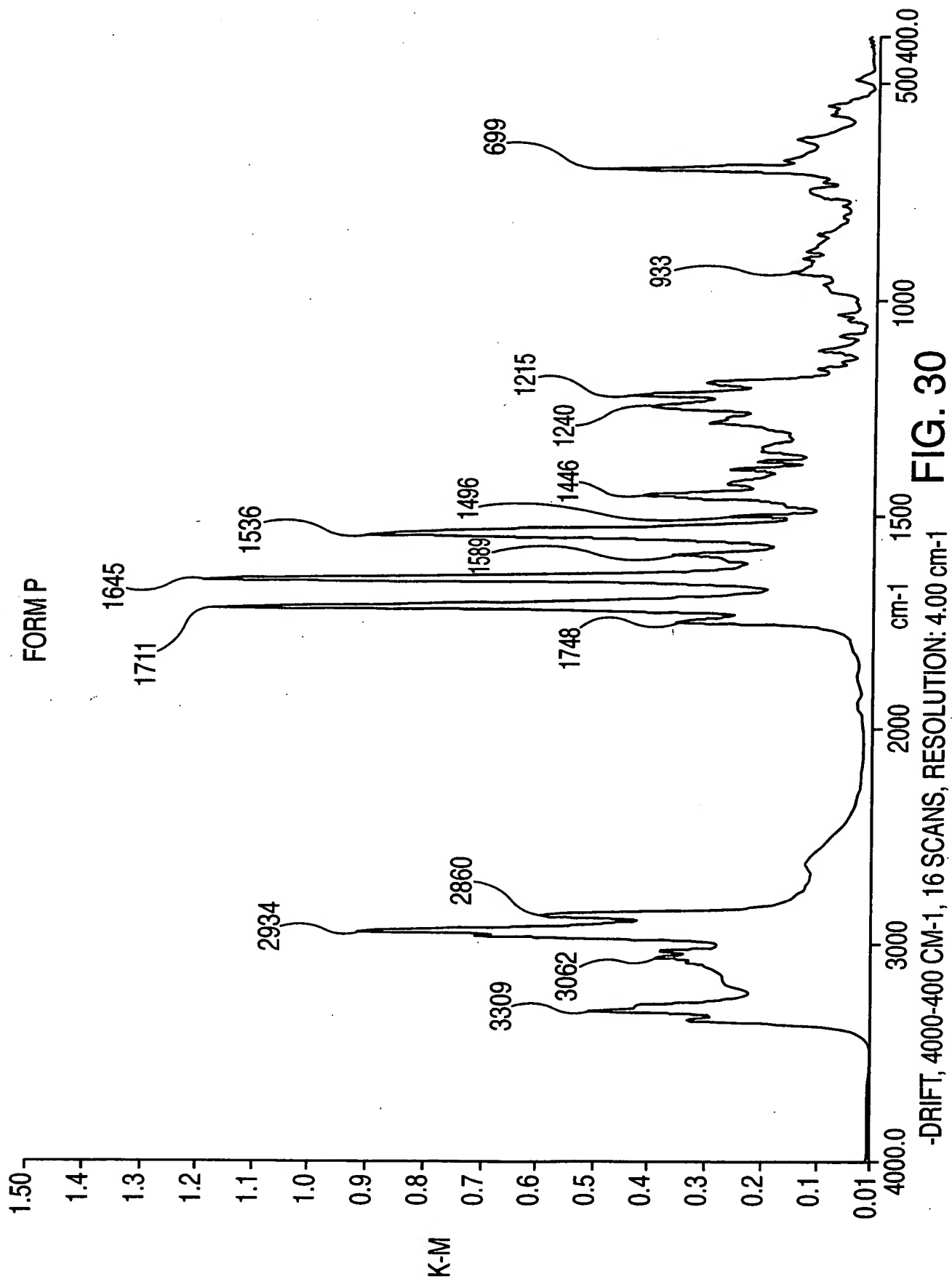


FIG. 28

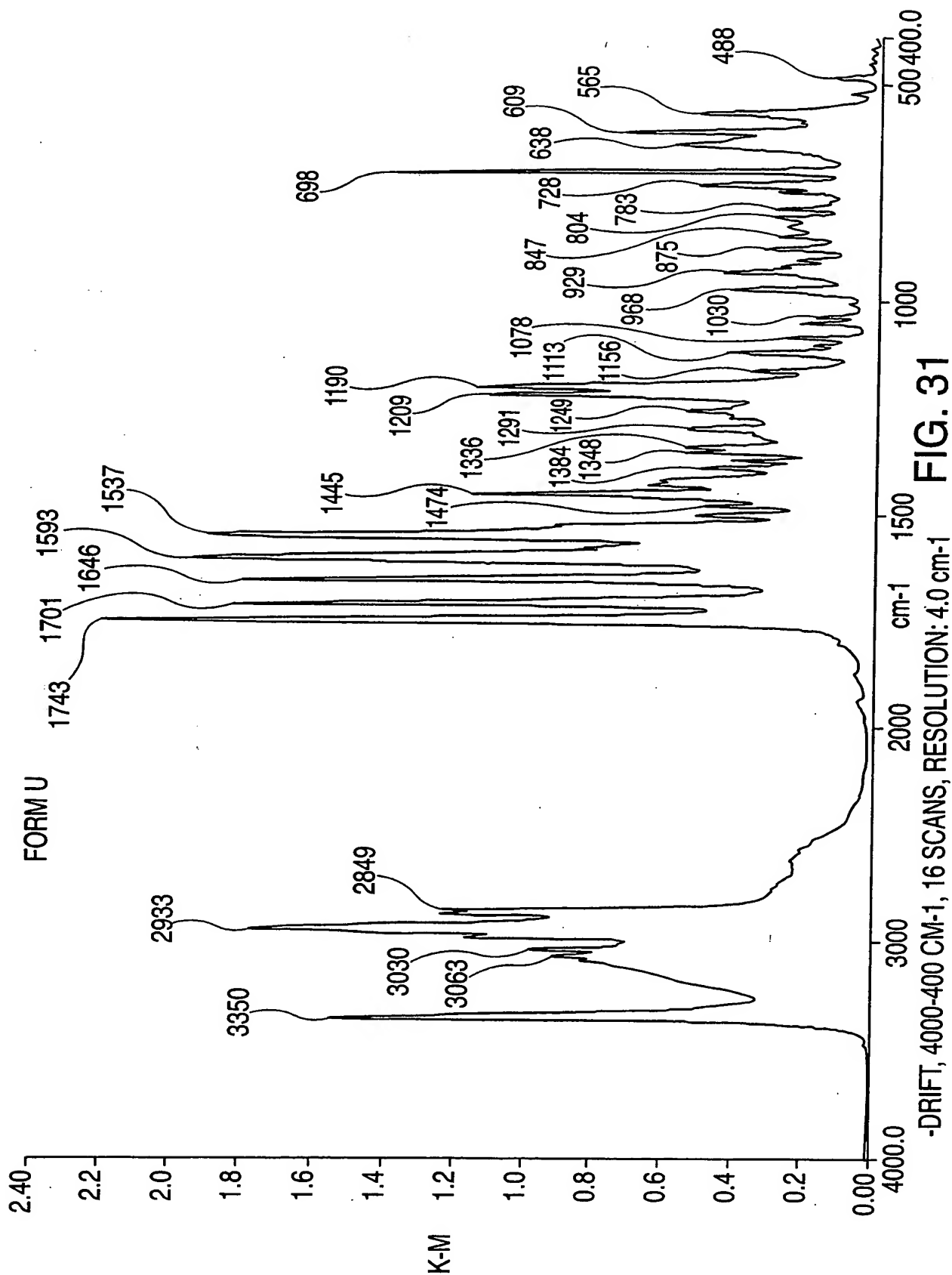
29/64



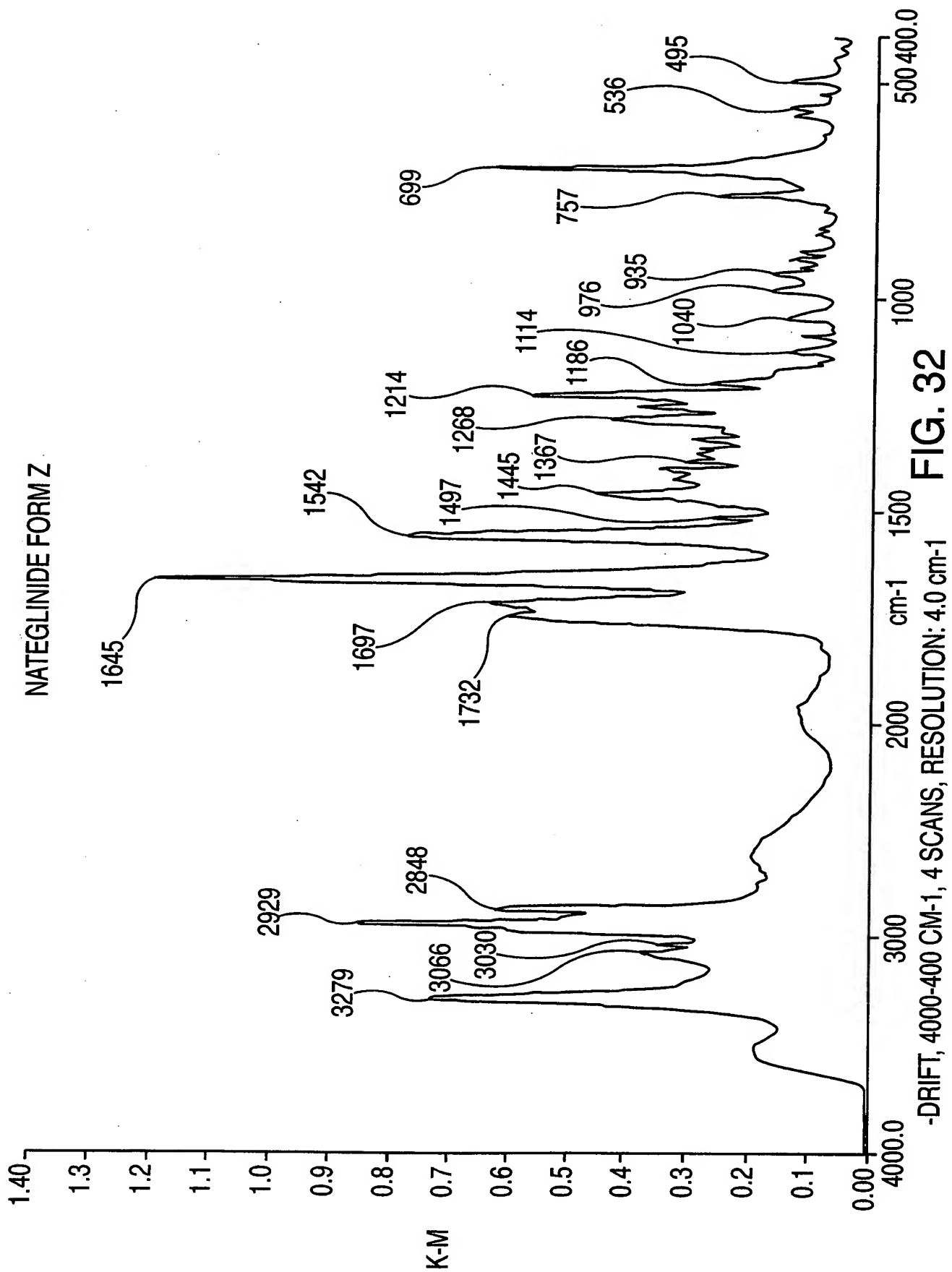
30/64



31/64



32/64



33/64

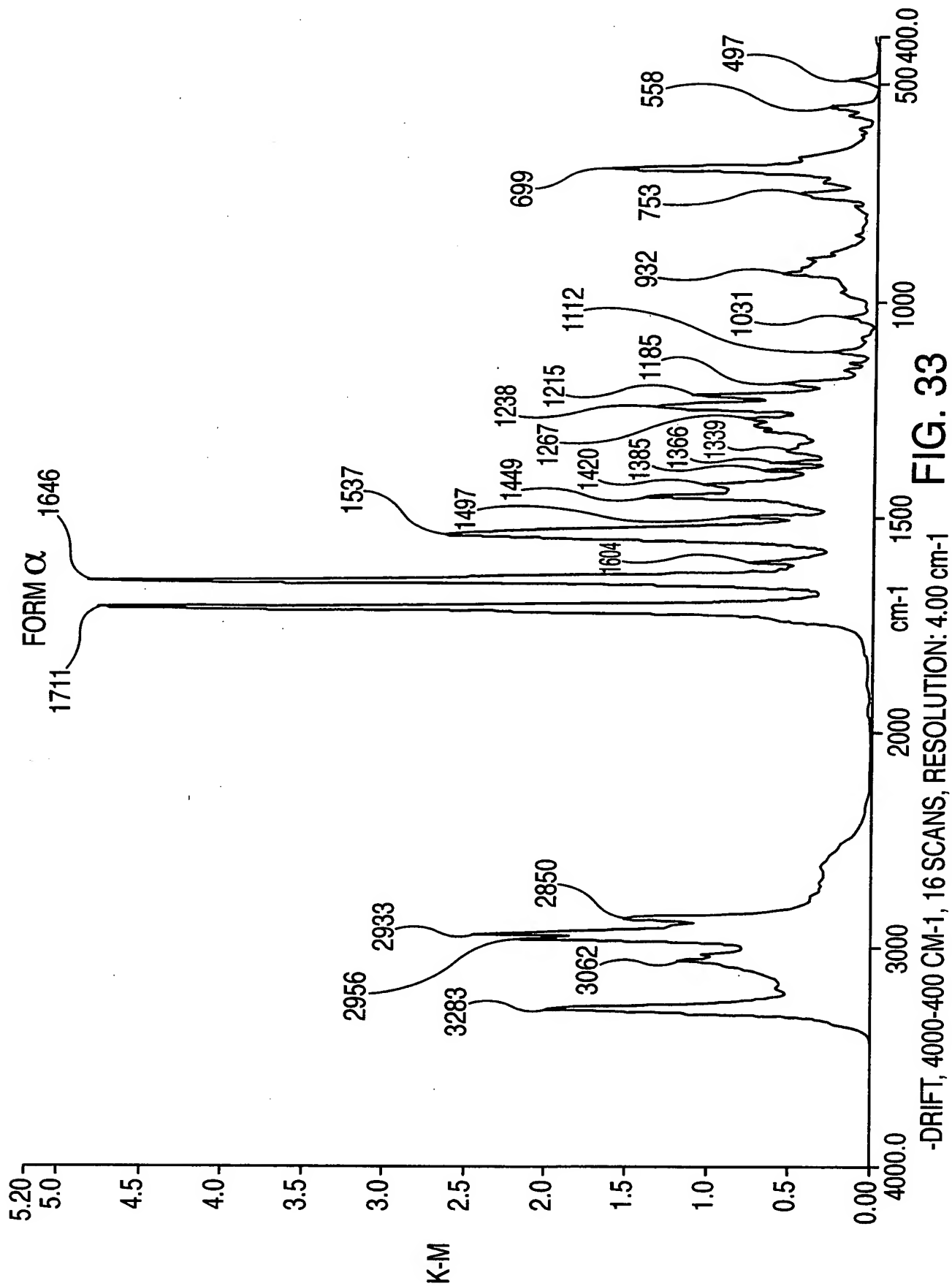
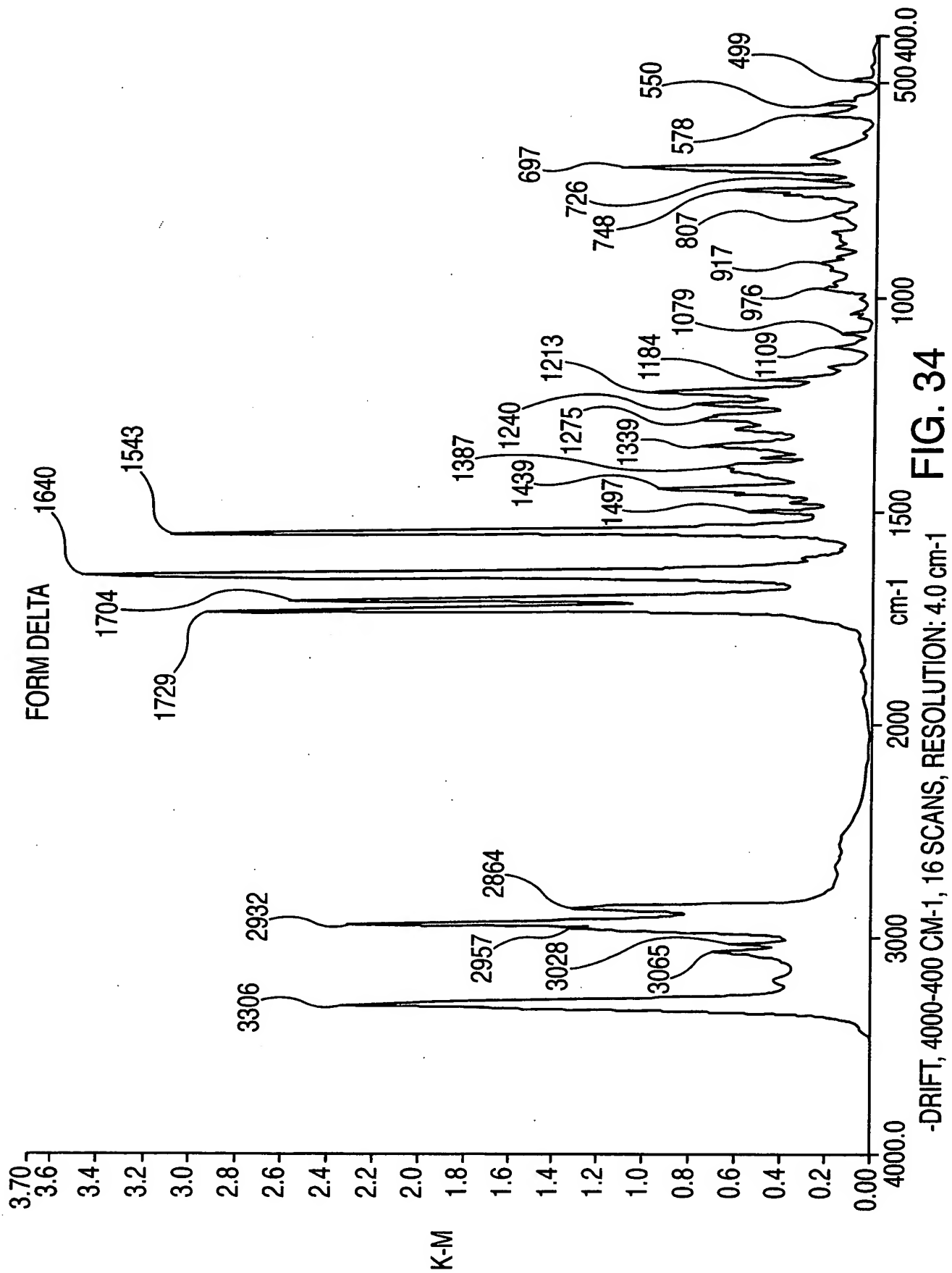
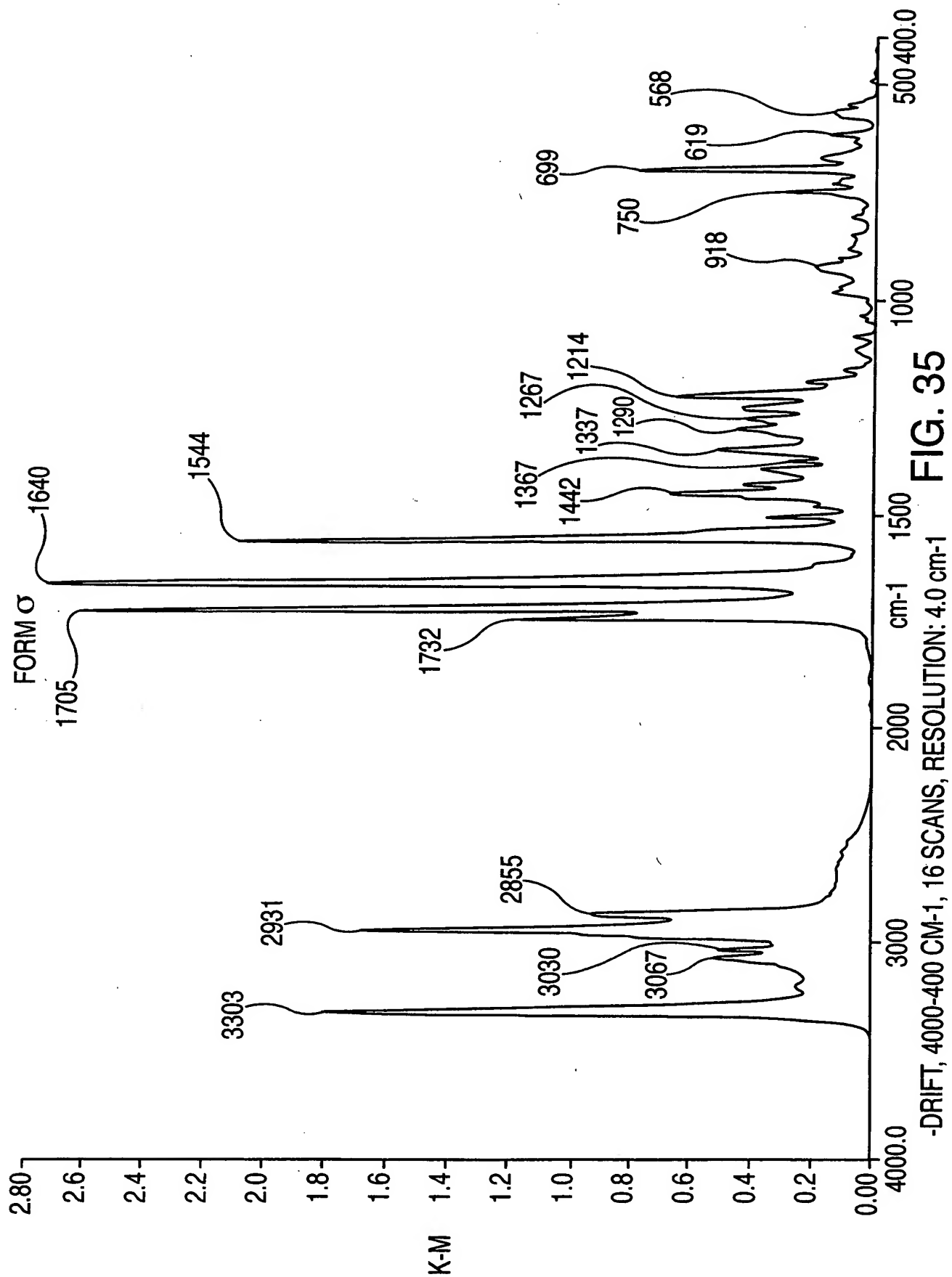


FIG. 33

34/64



35/64



36/64

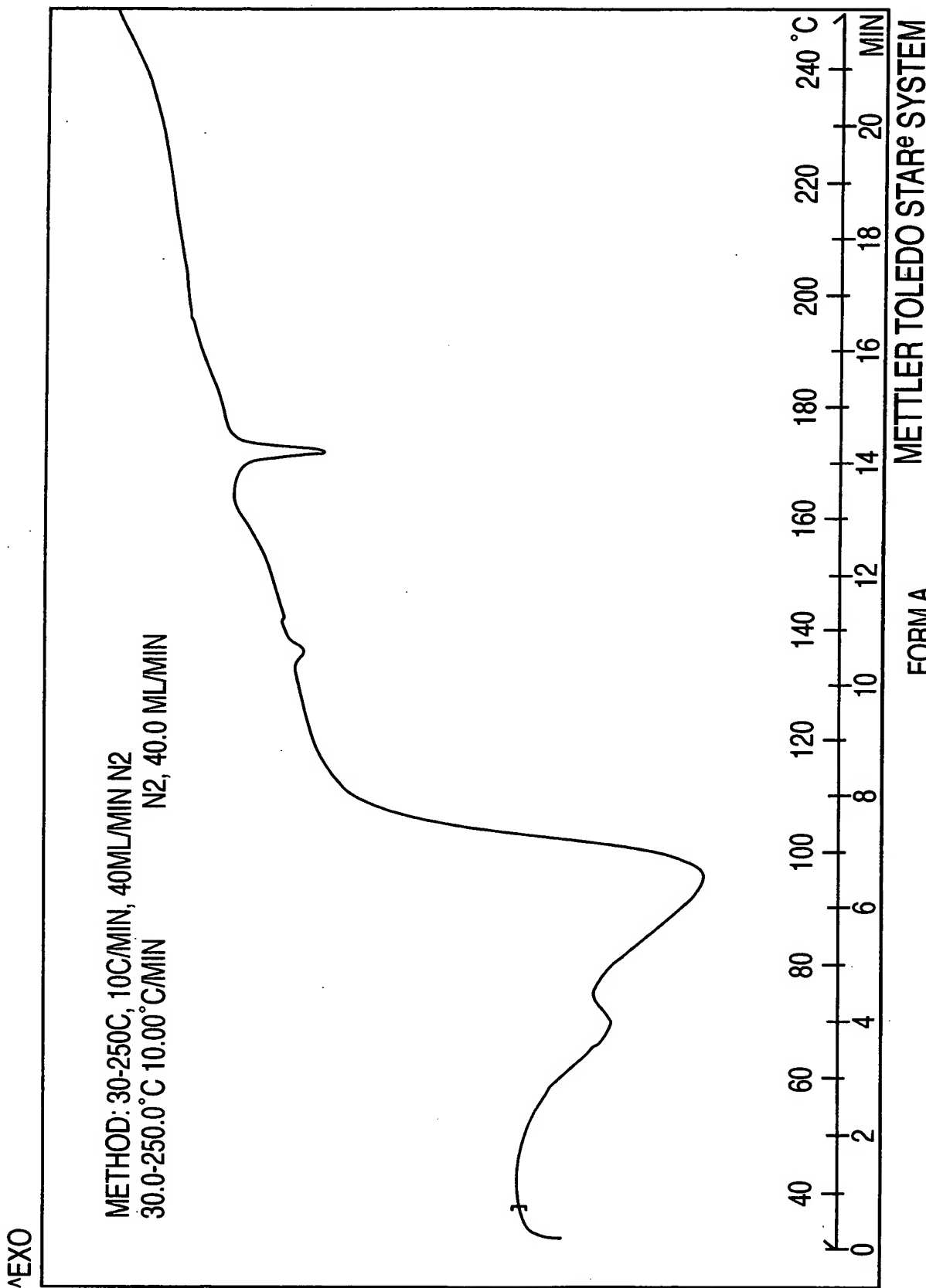
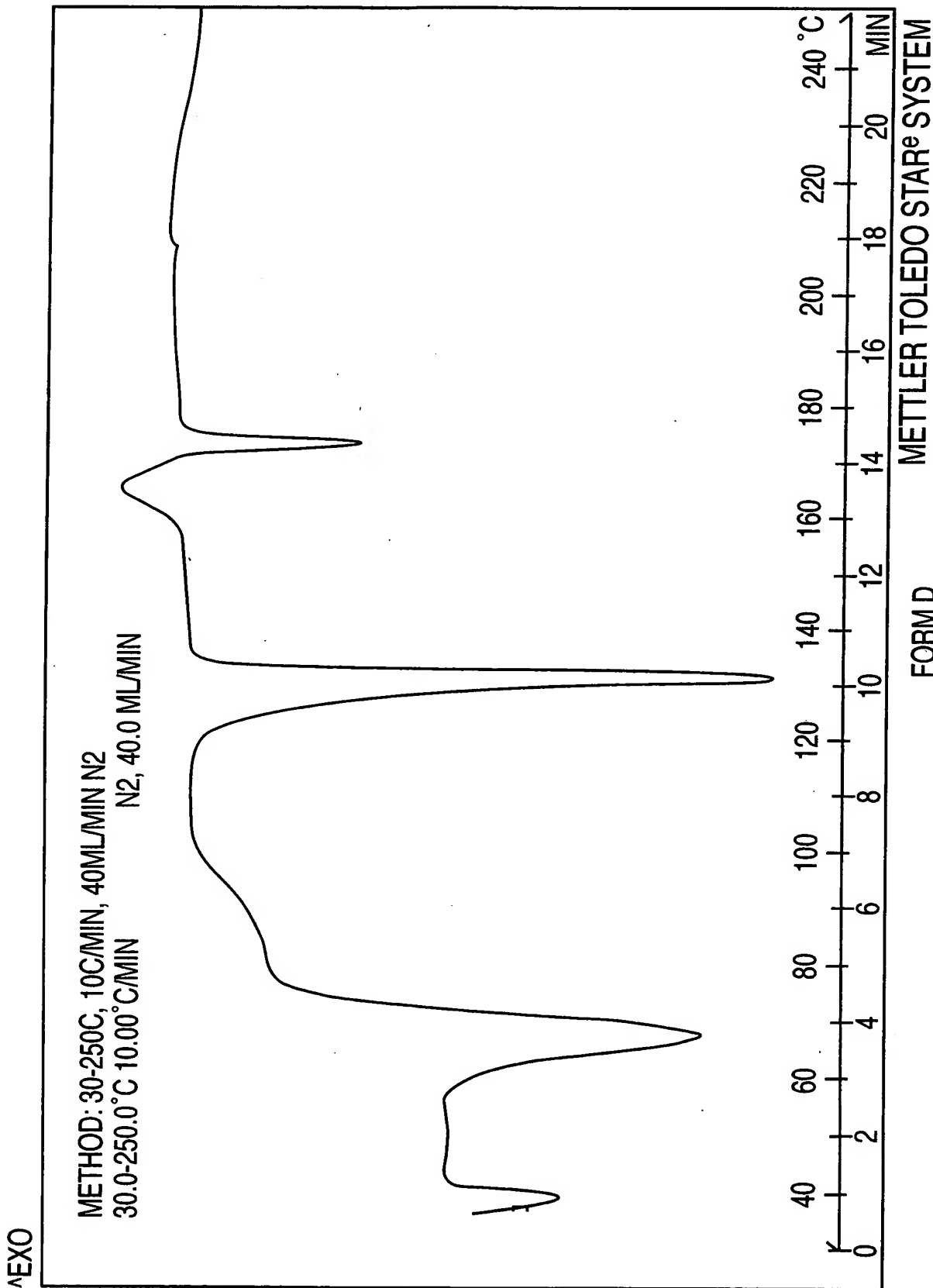


FIG. 36

37/64



38/64

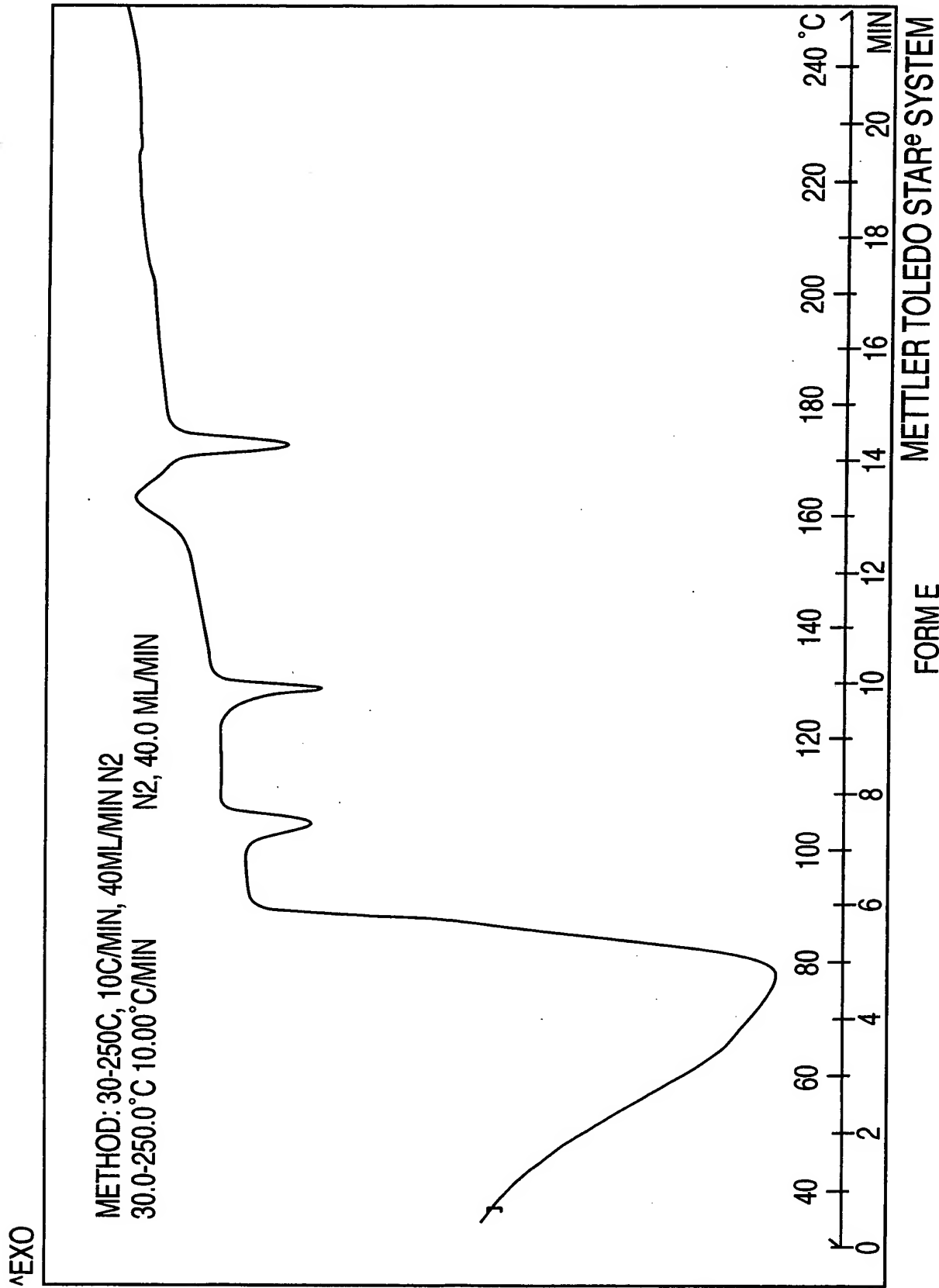


FIG. 38

39/64

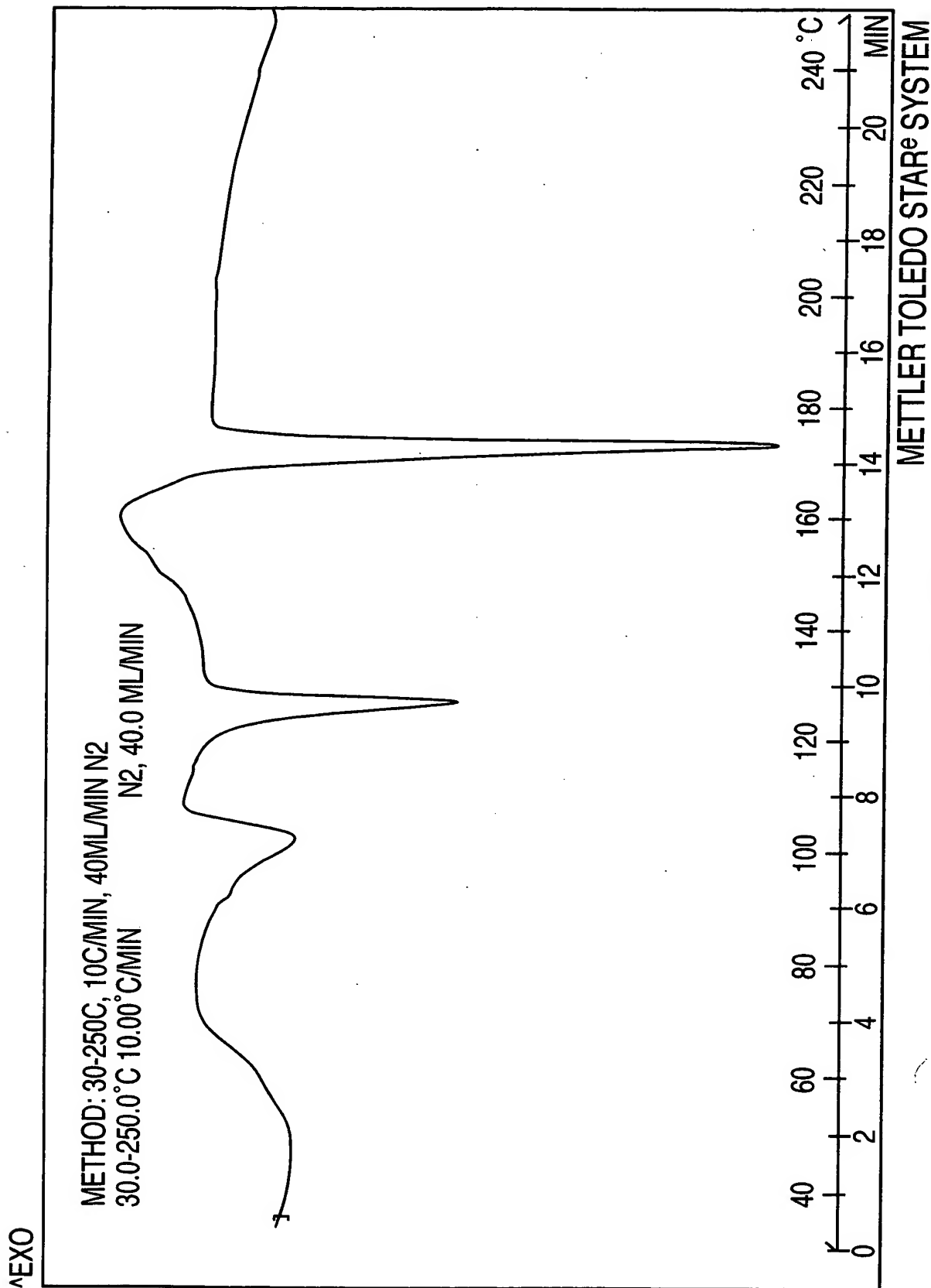


FIG. 39

40/64

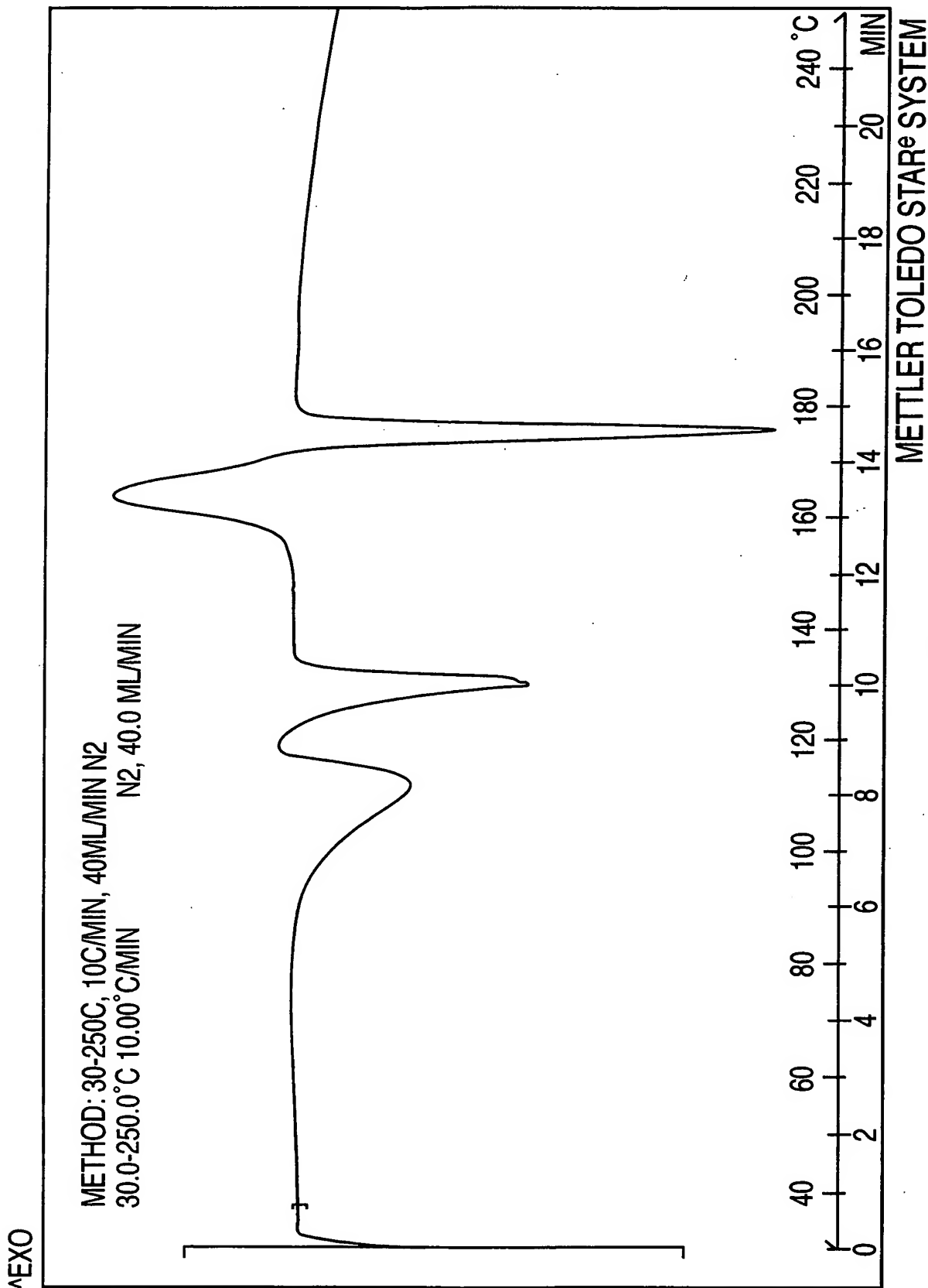


FIG. 40

41/64

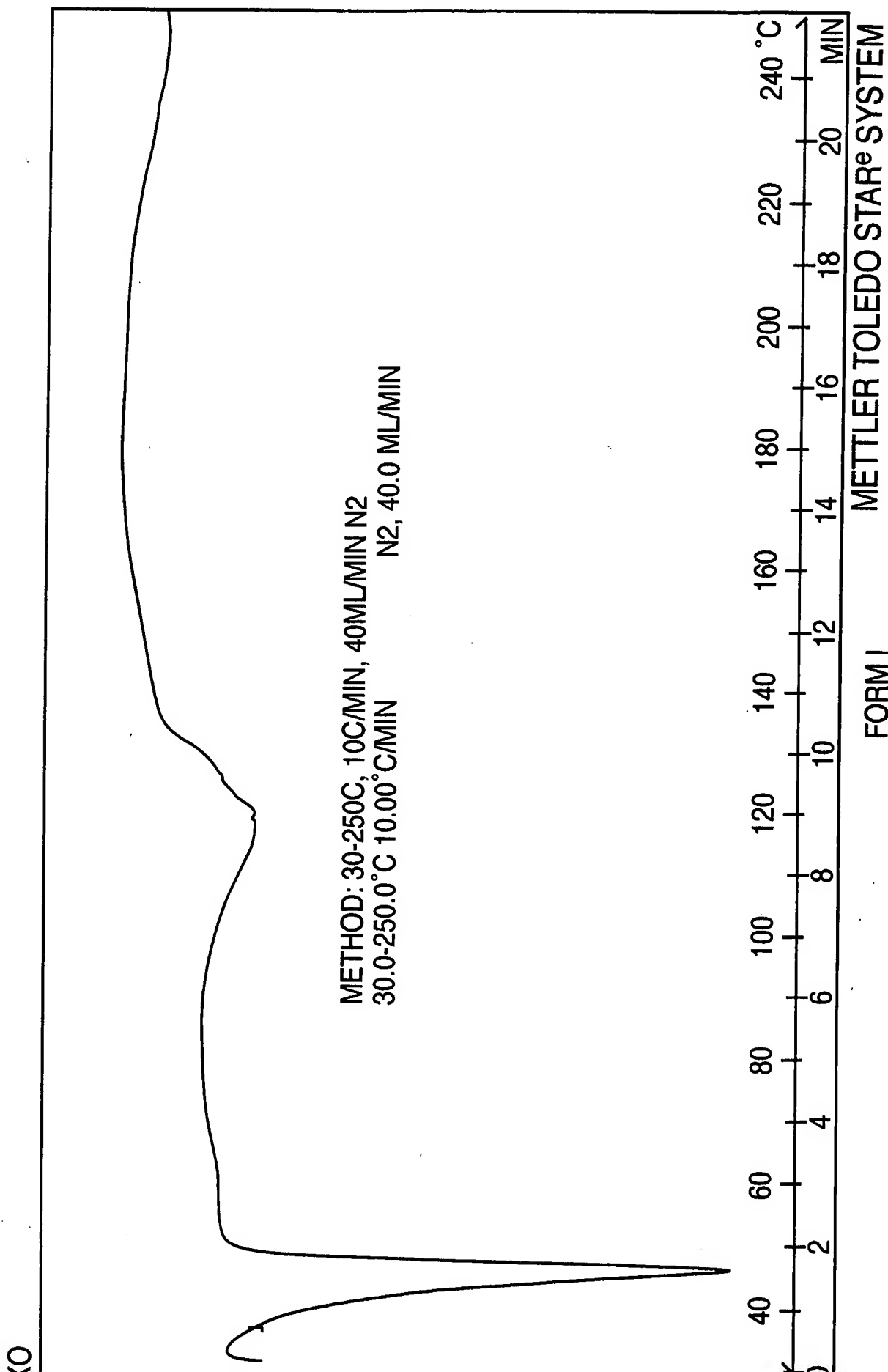


FIG. 41

42/64

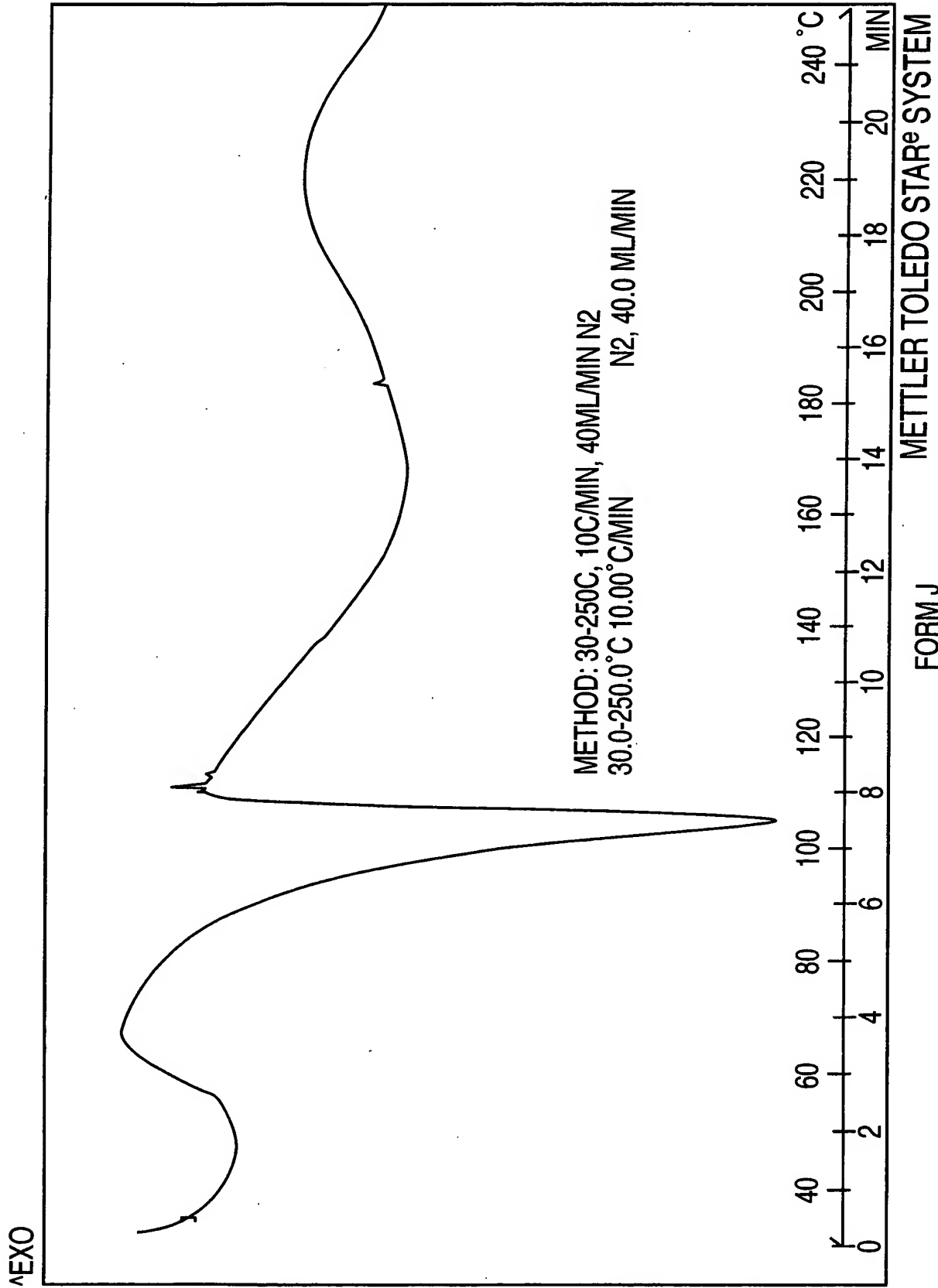
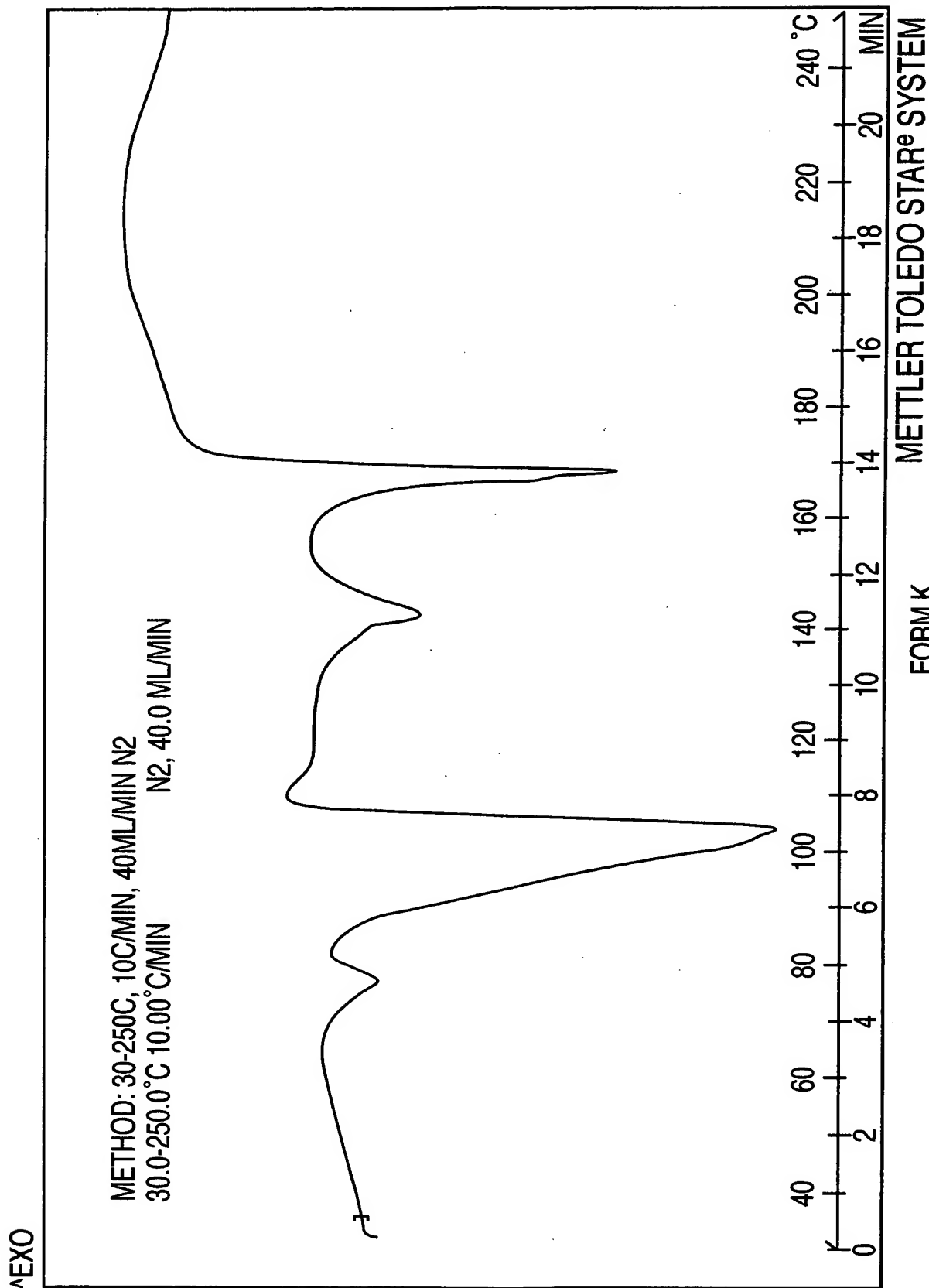


FIG. 42

43/64



FORM K

FIG. 43

44/64

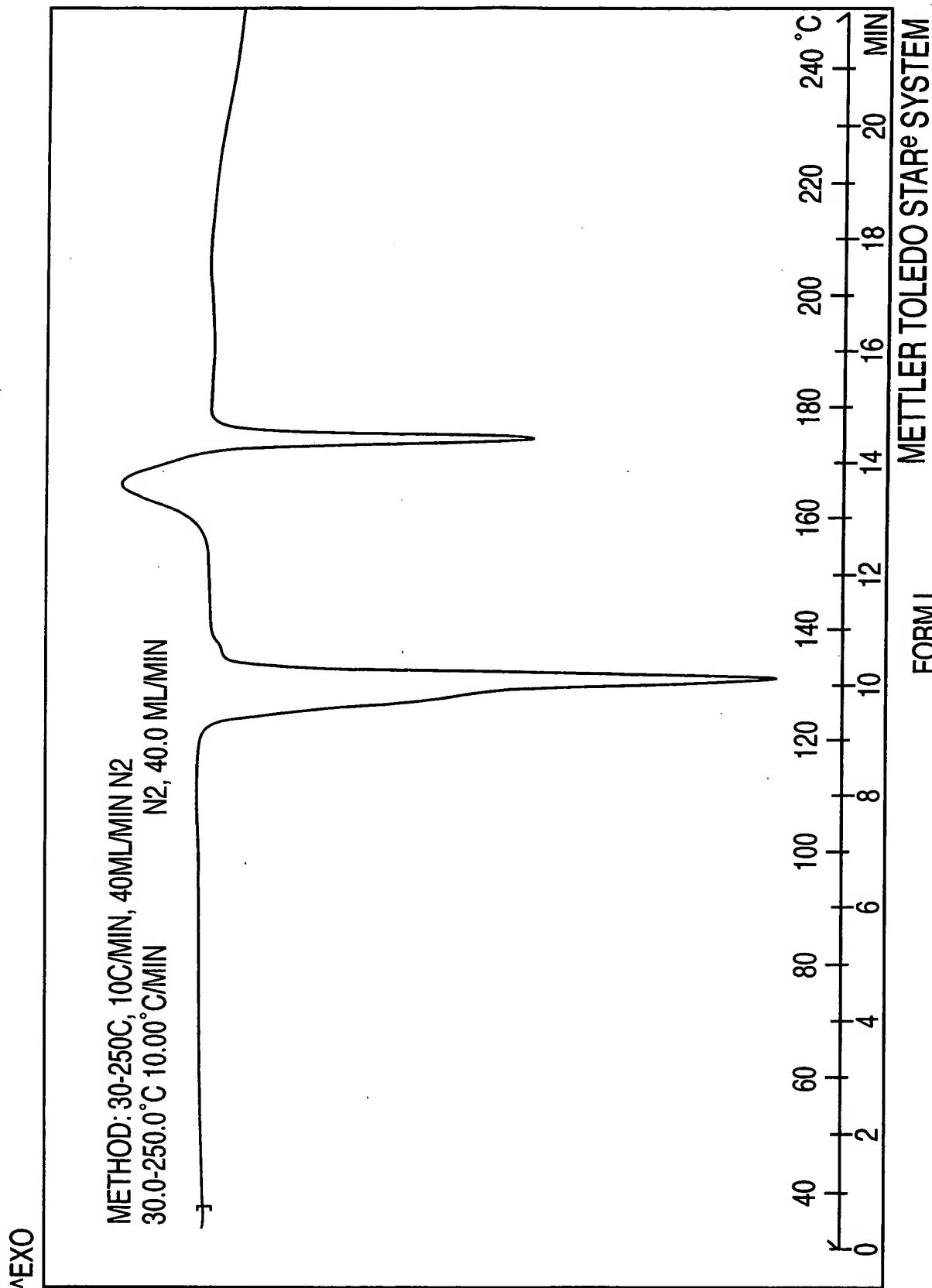


FIG. 44

45/64

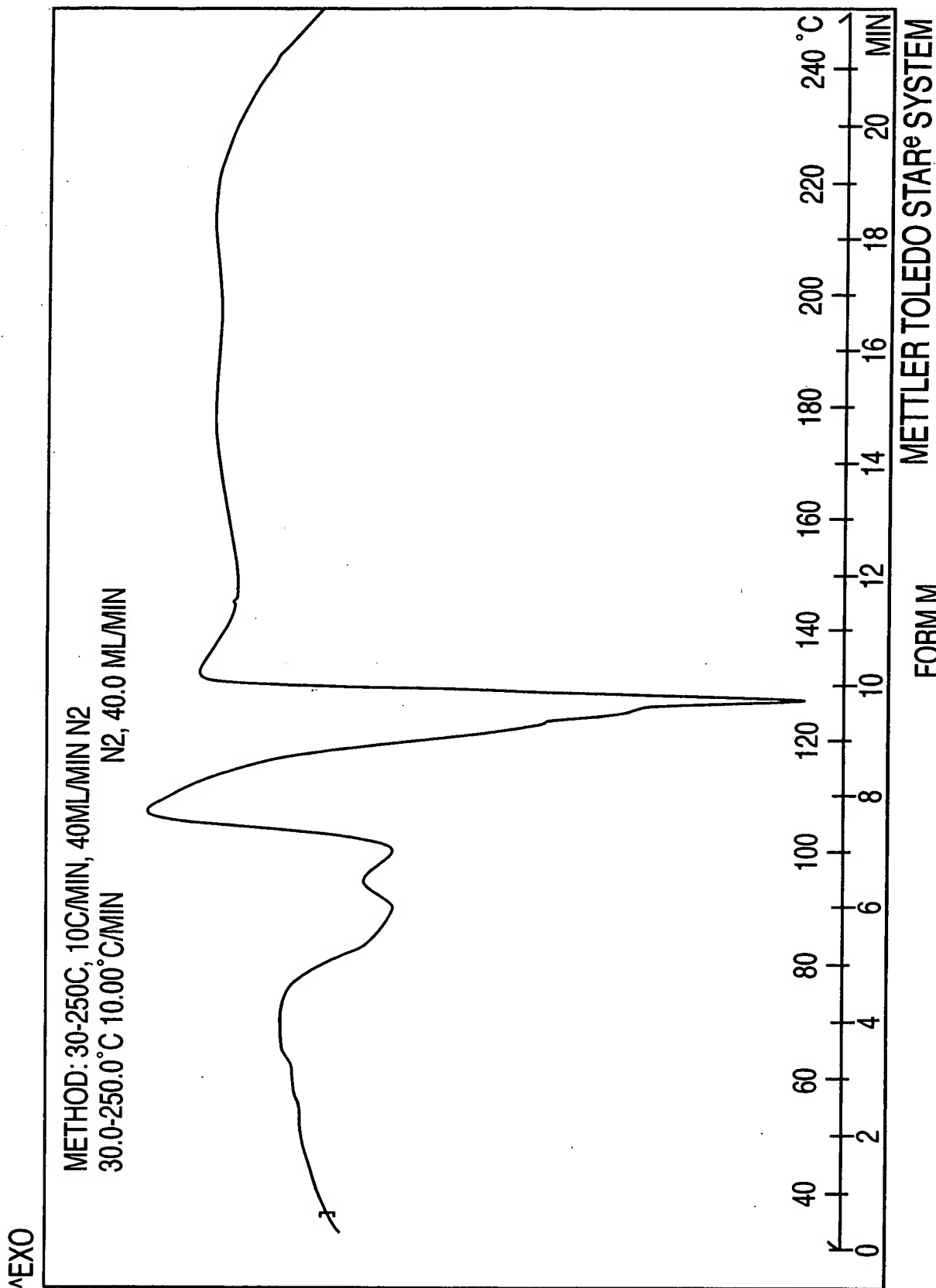


FIG. 45

46/64

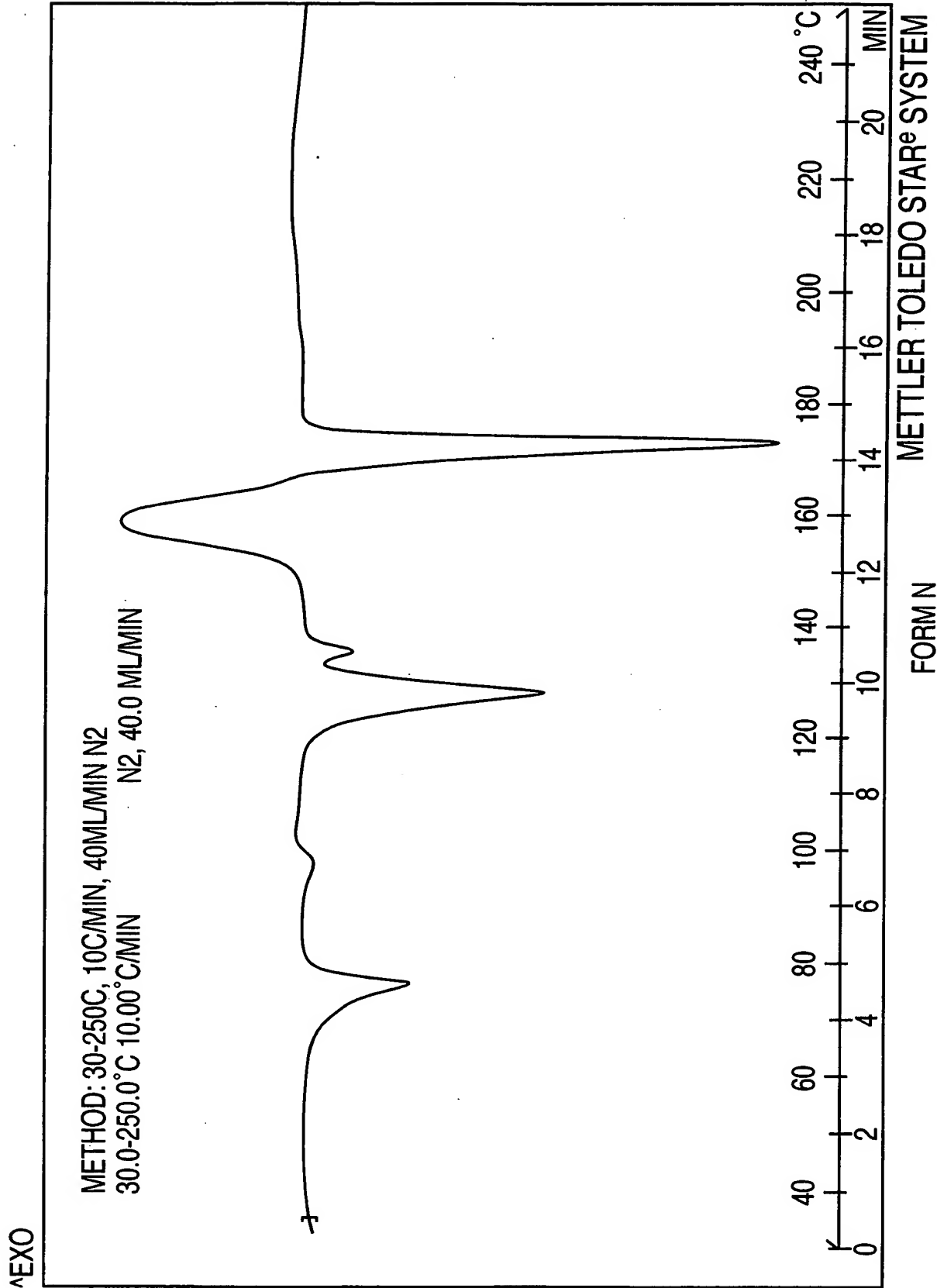
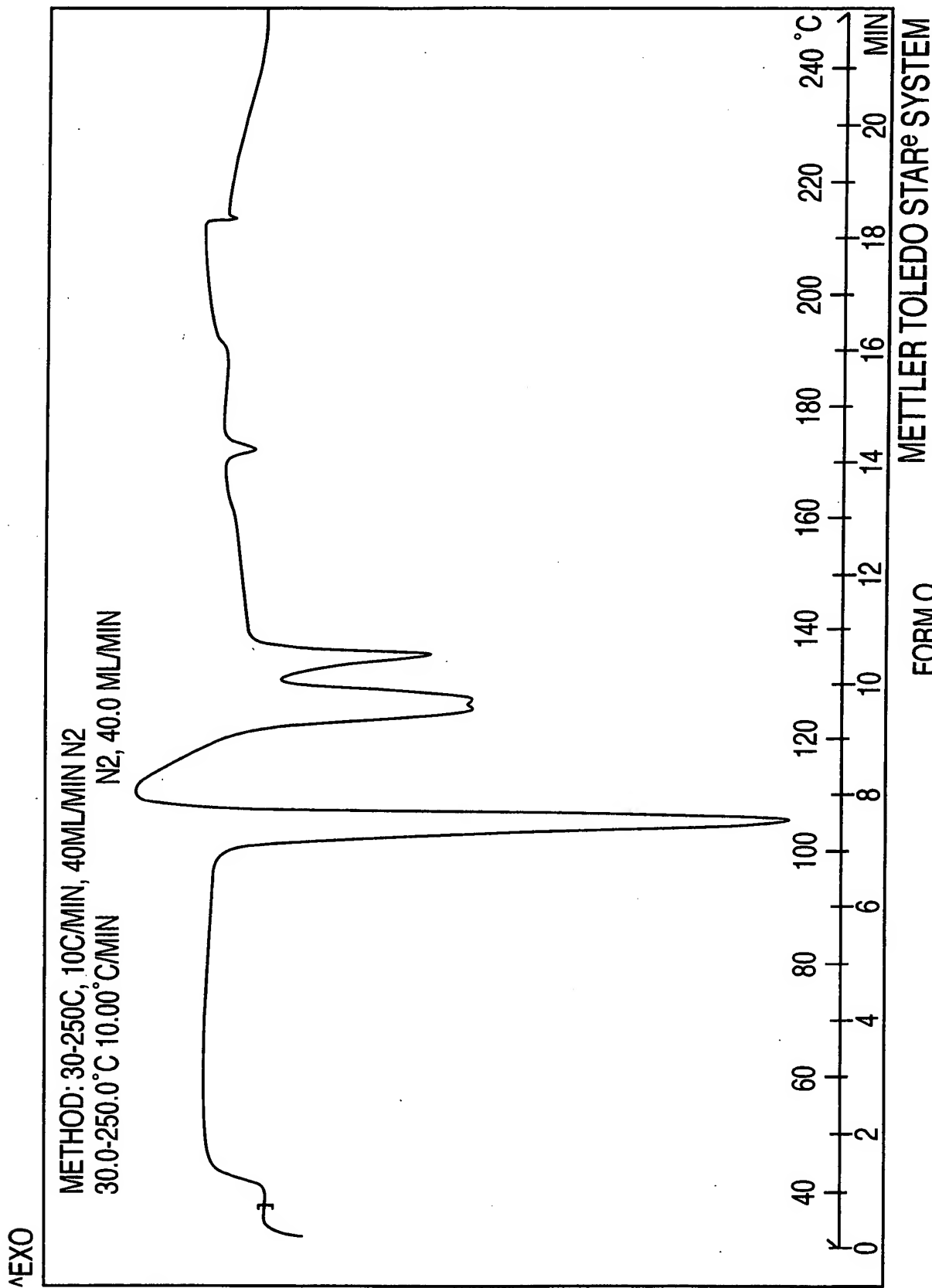


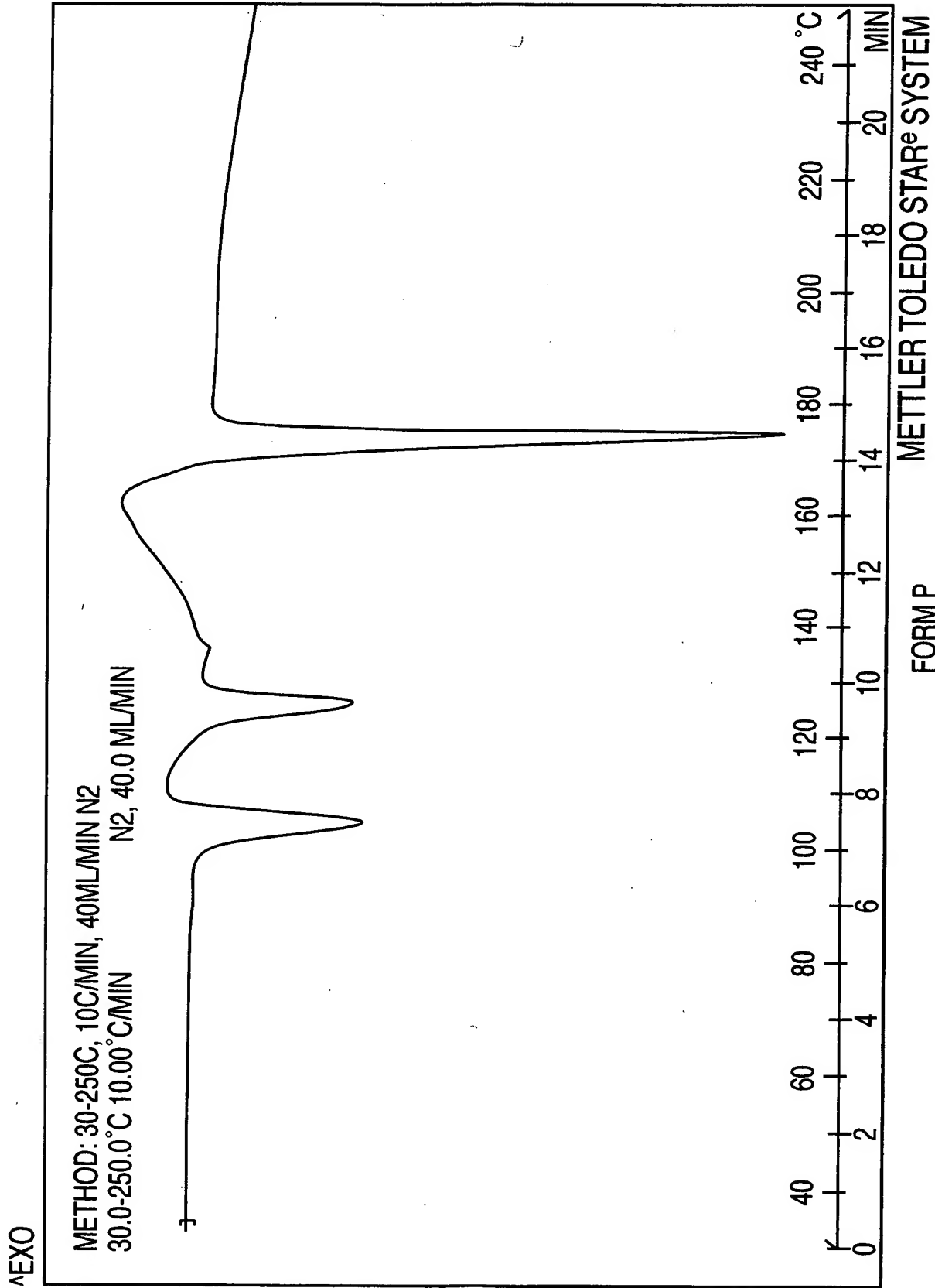
FIG. 46

47/64

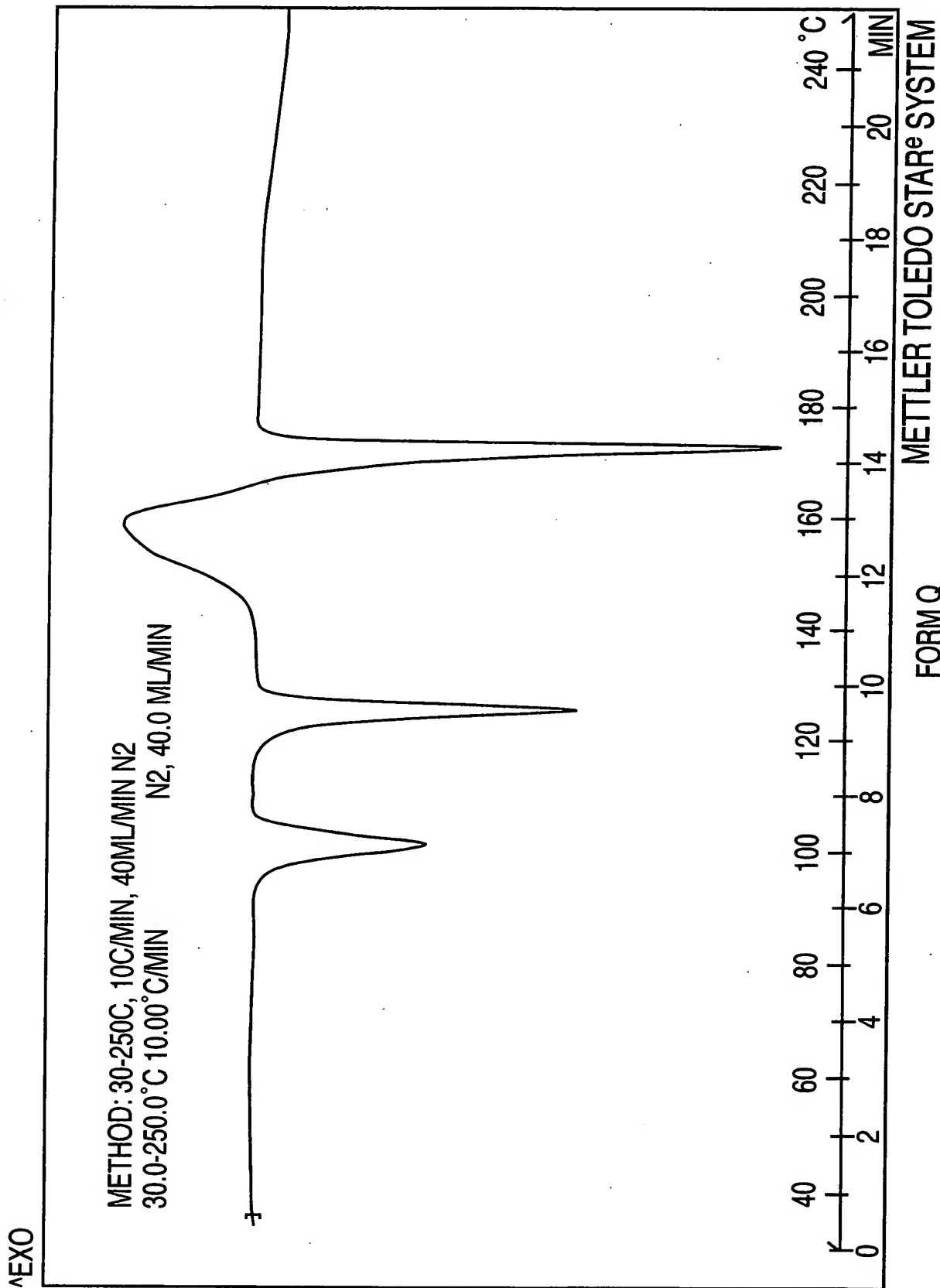


FORM O
FIG. 47

48/64



49/64



FORM Q
FIG. 49

50/64

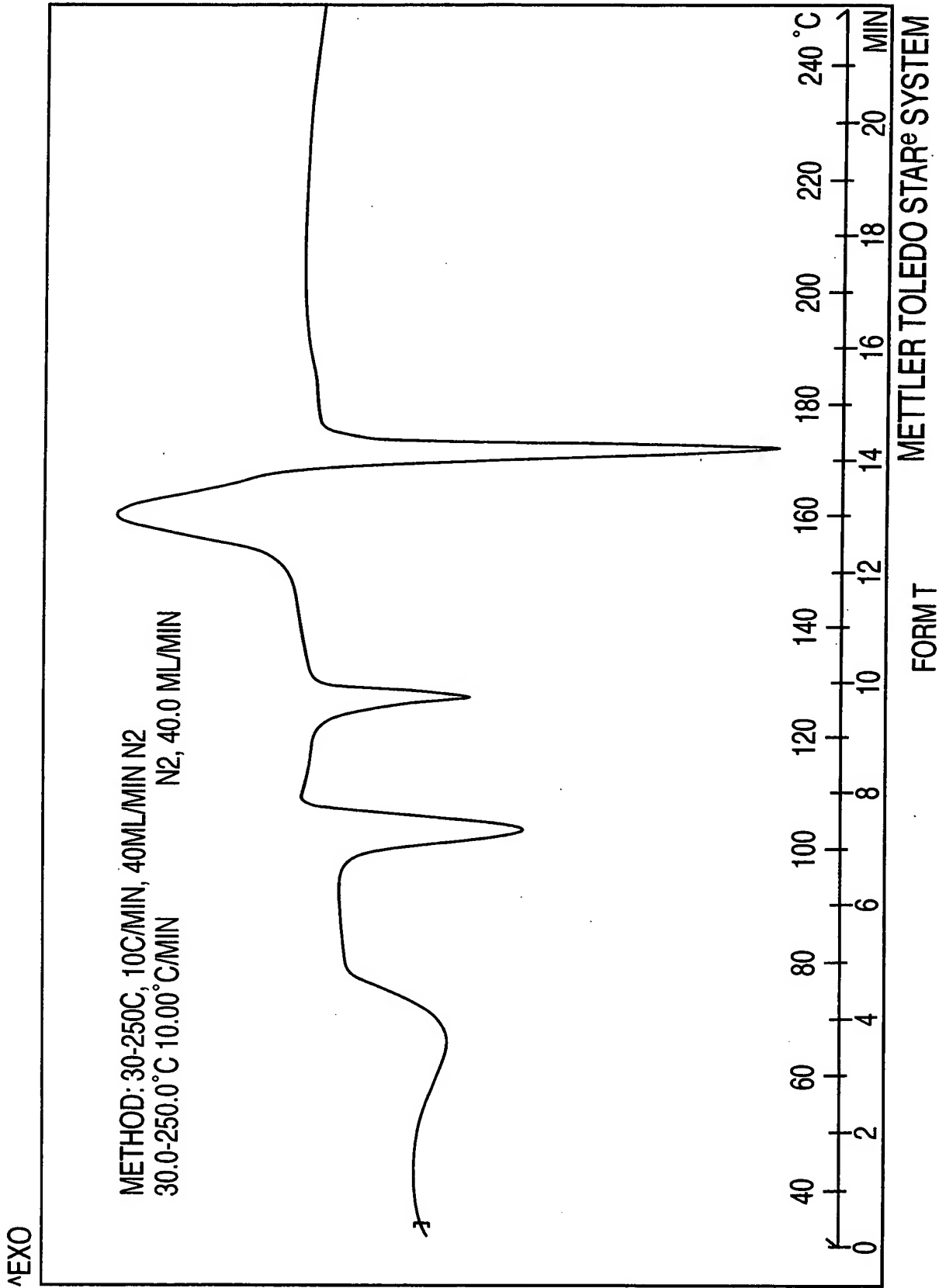


FIG. 50

51/64

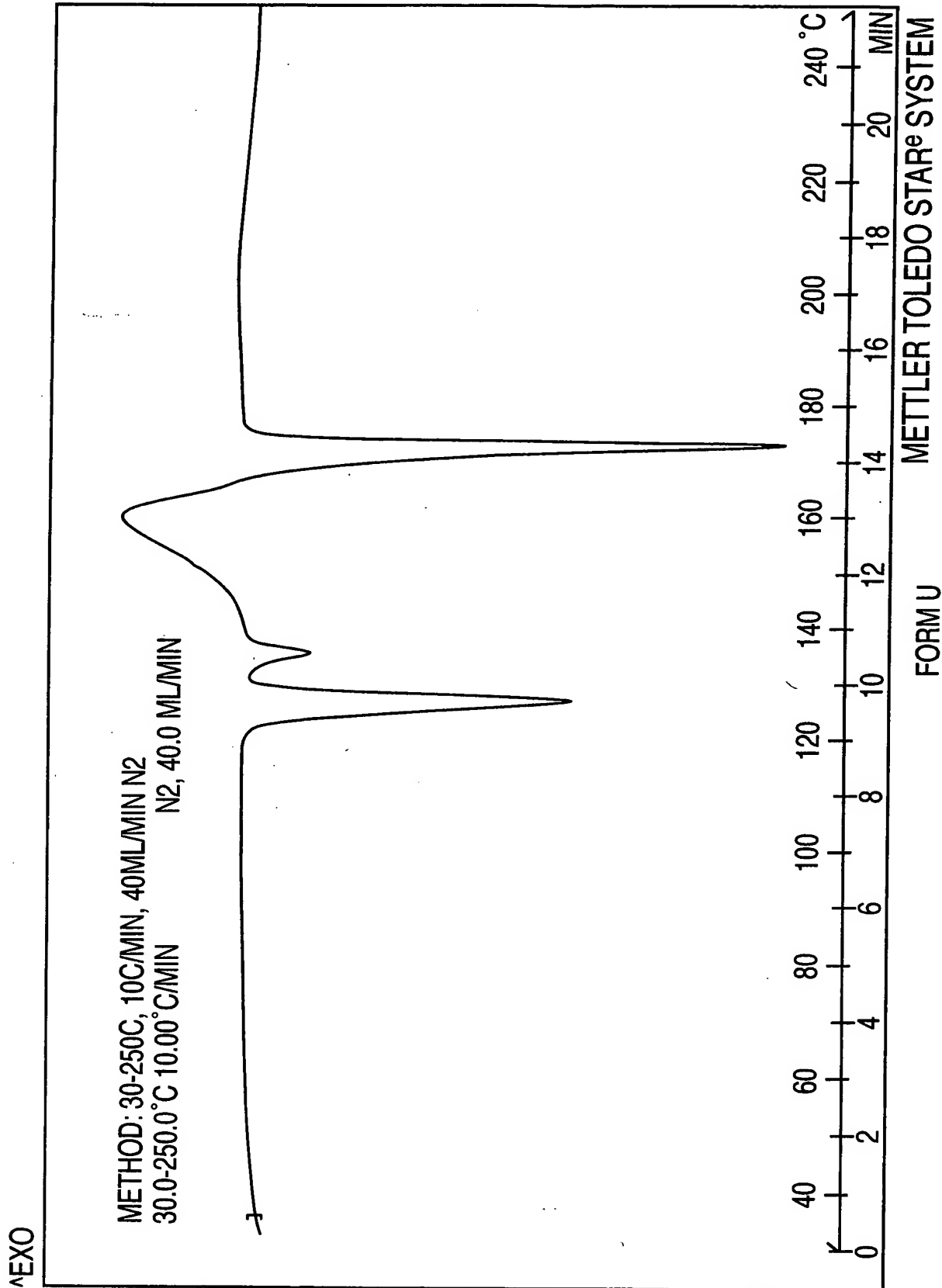


FIG. 51

52/64

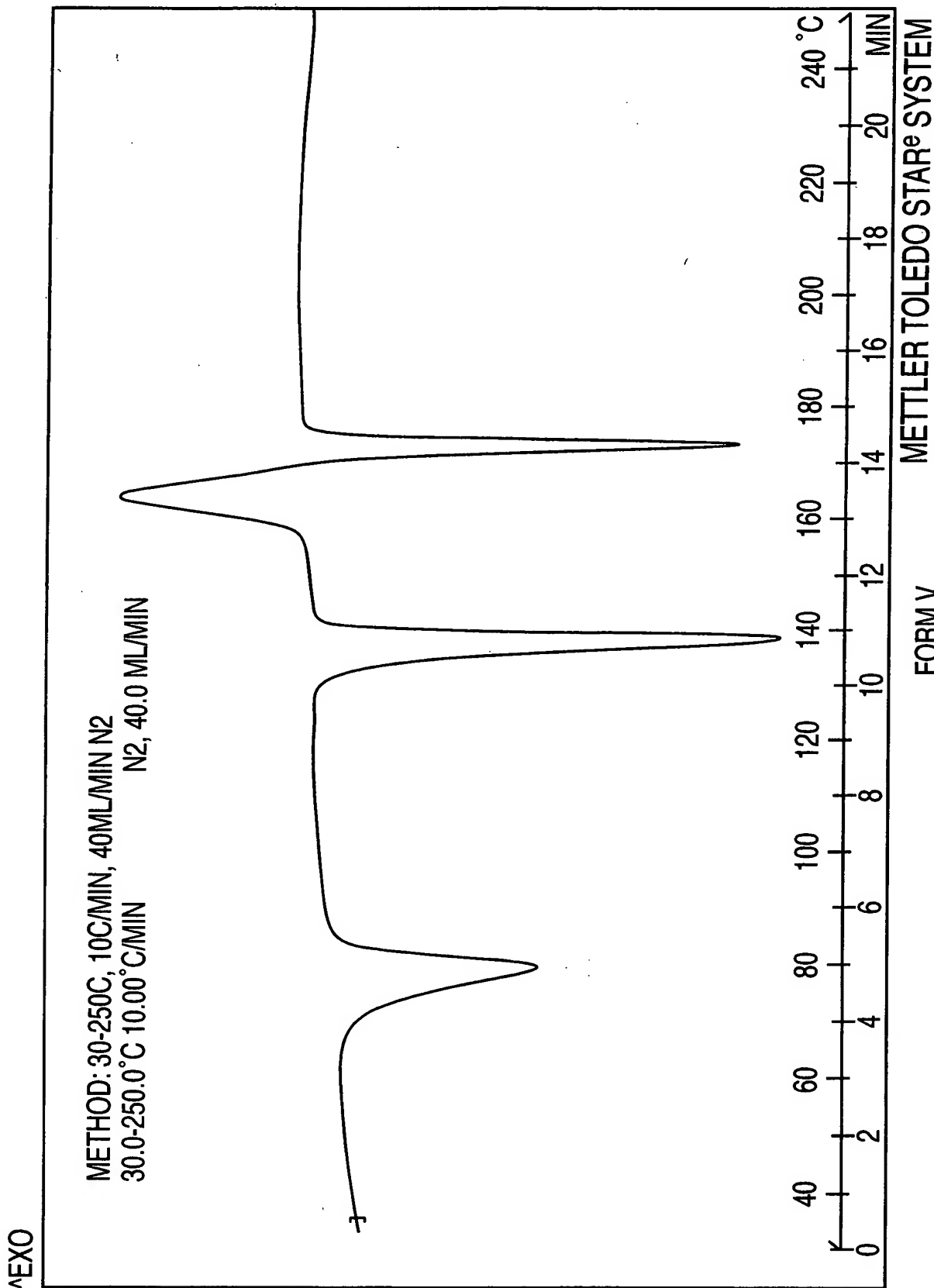


FIG. 52

53/64

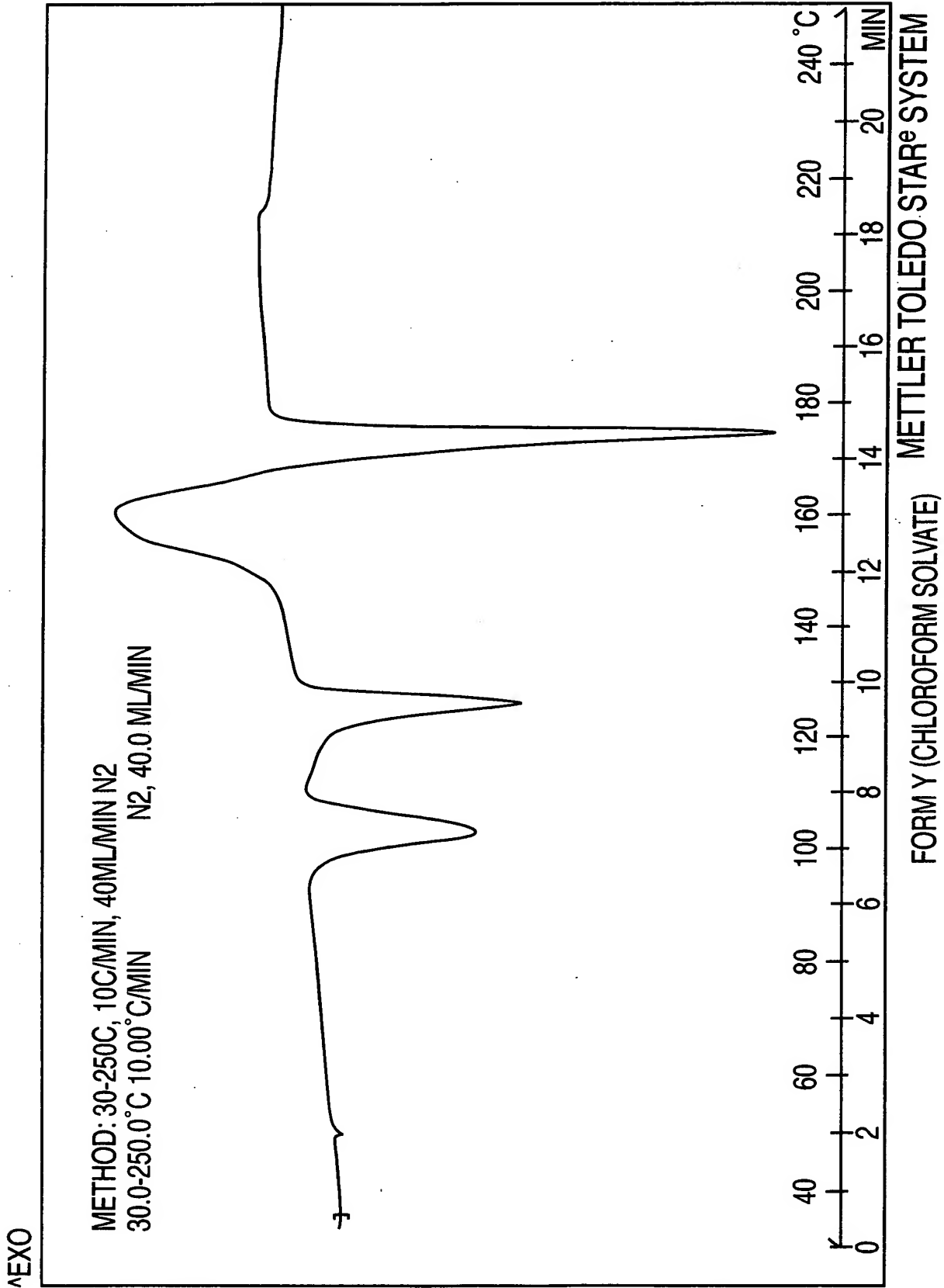


FIG. 53

54/64

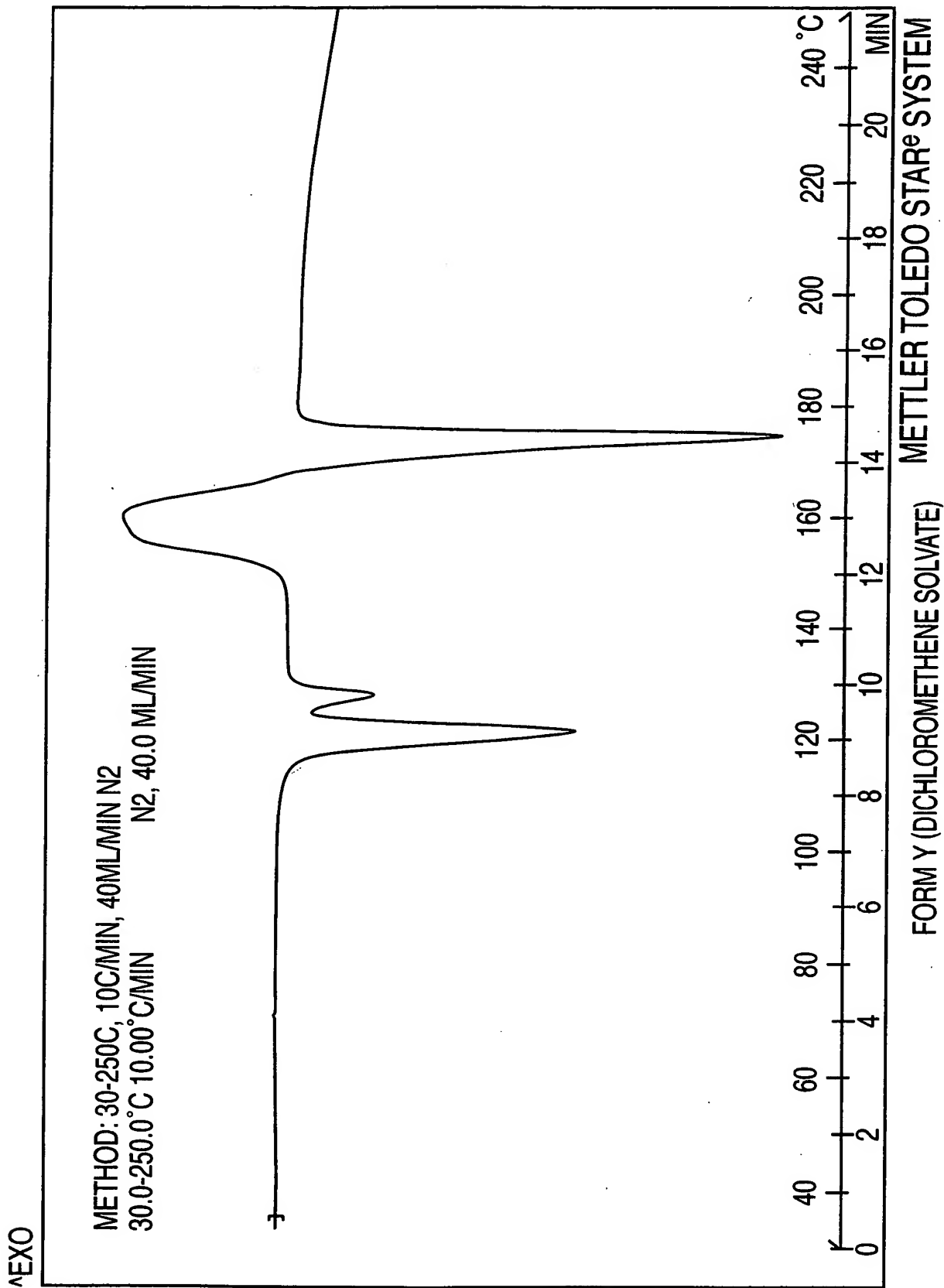
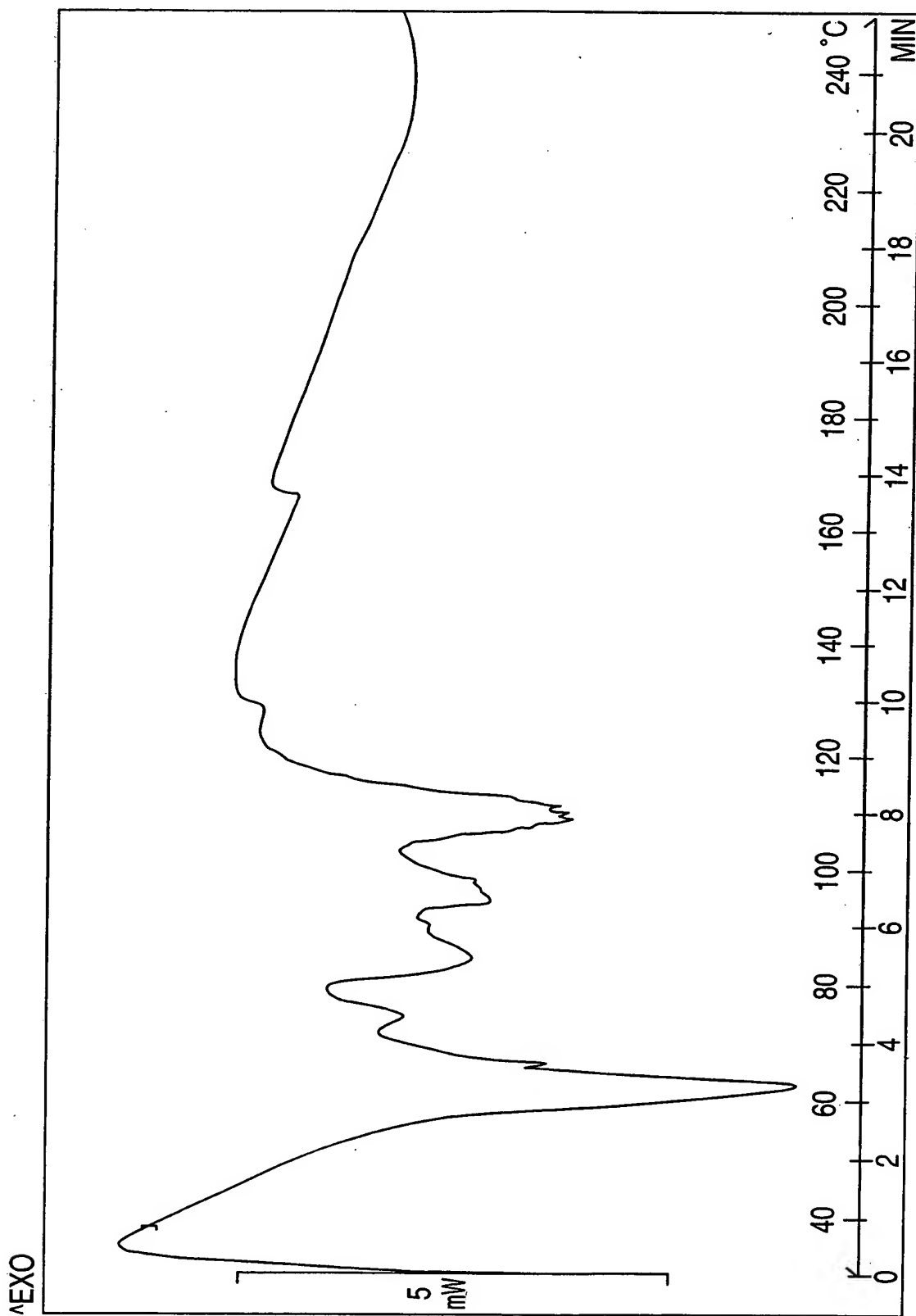


FIG. 54

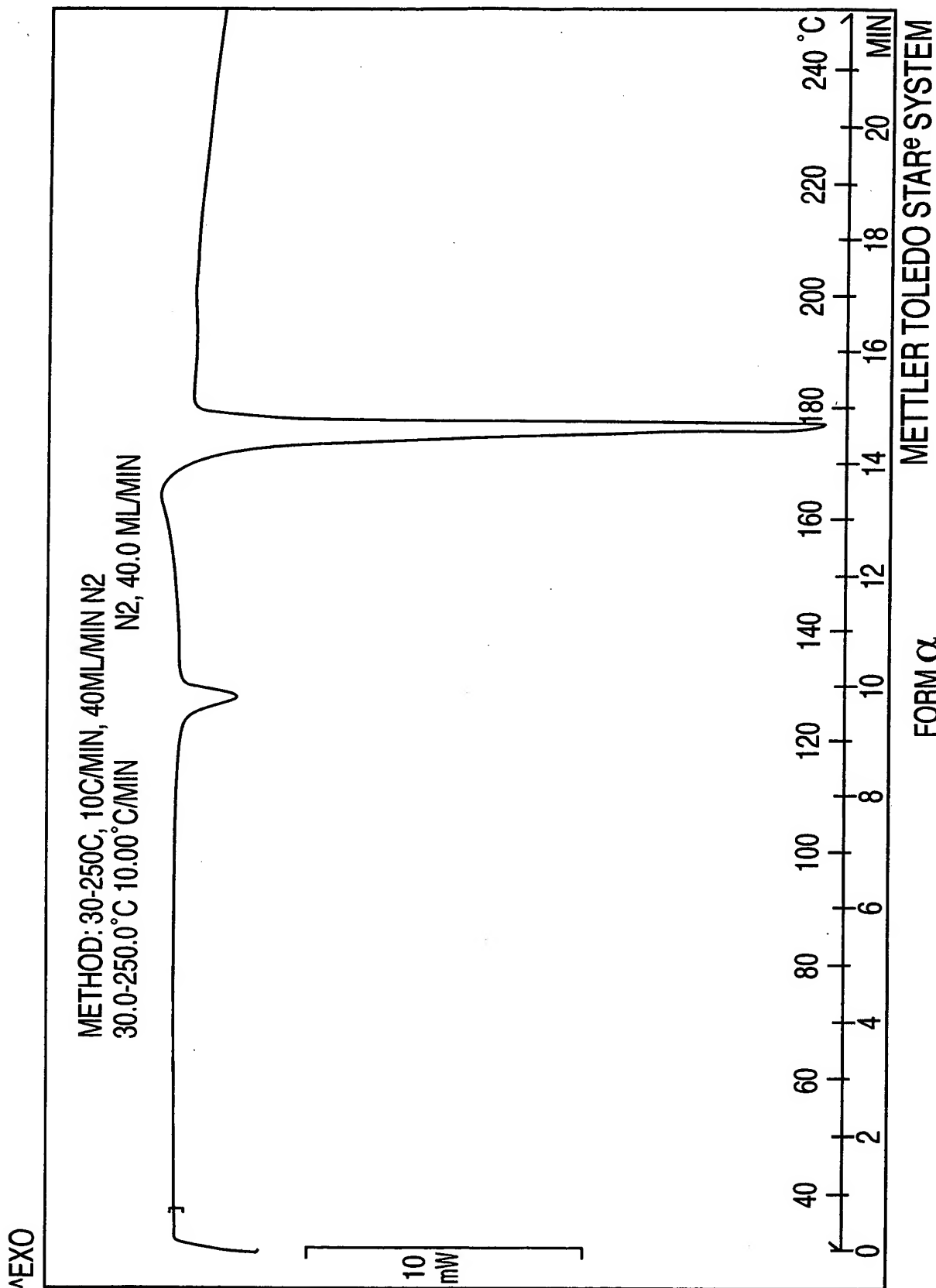
55/64



NATEGLINIDE FORM Z
METTLER TOLEDO STAR® SYSTEM

FIG. 55

56/64



FORM α
FIG. 56

57/64

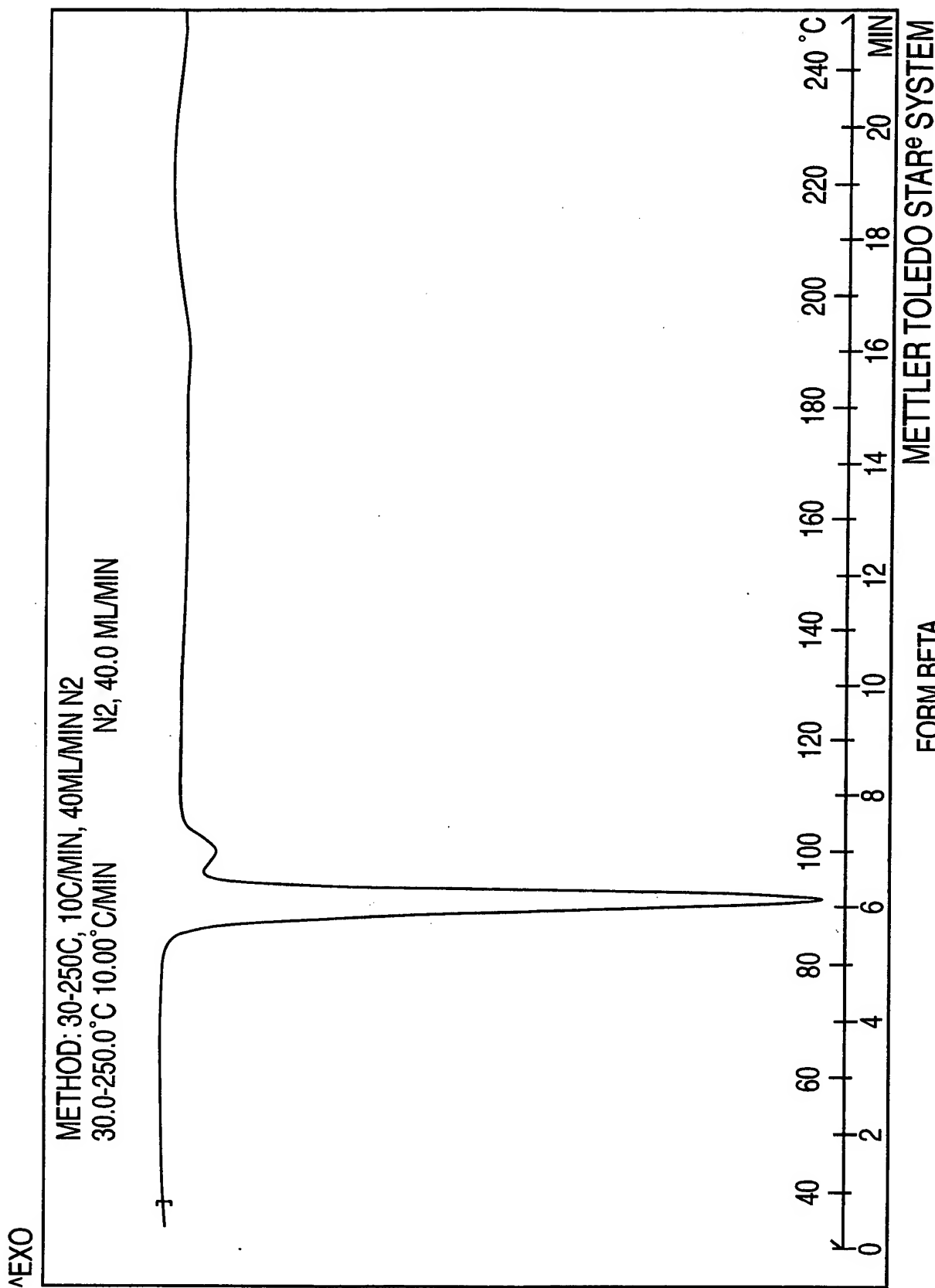


FIG. 57

58/64

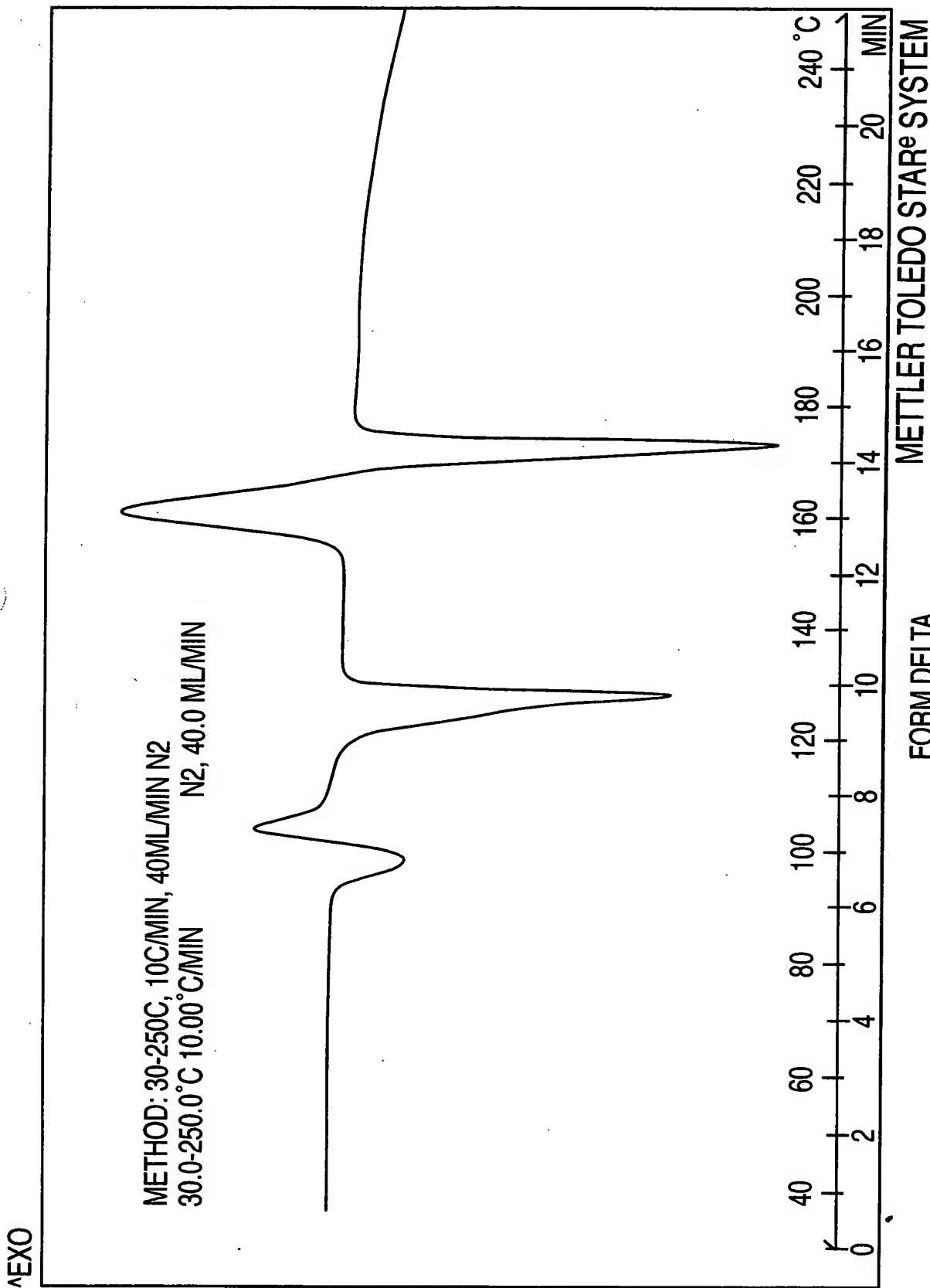


FIG. 58

59/64

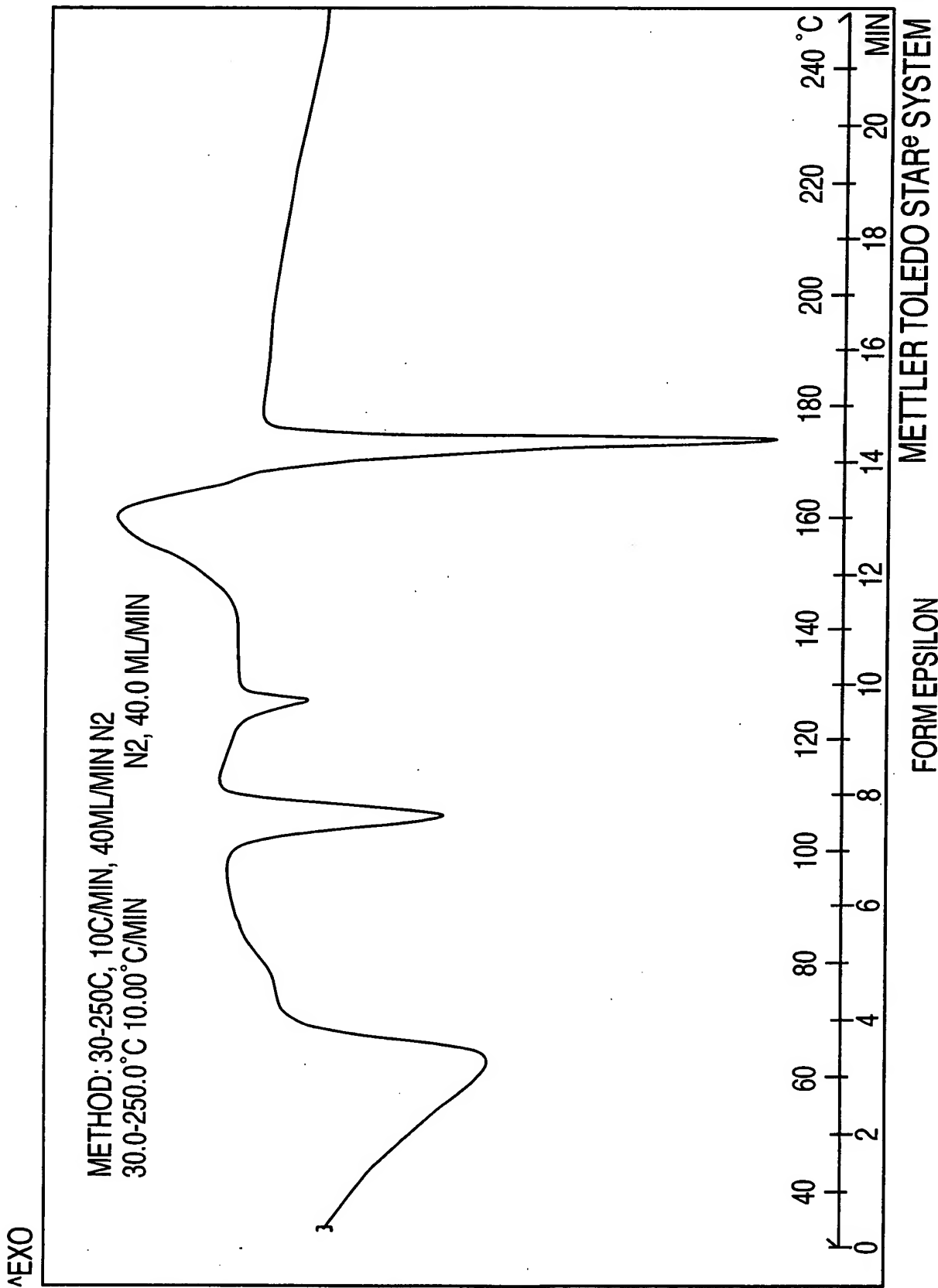


FIG. 59

60/64

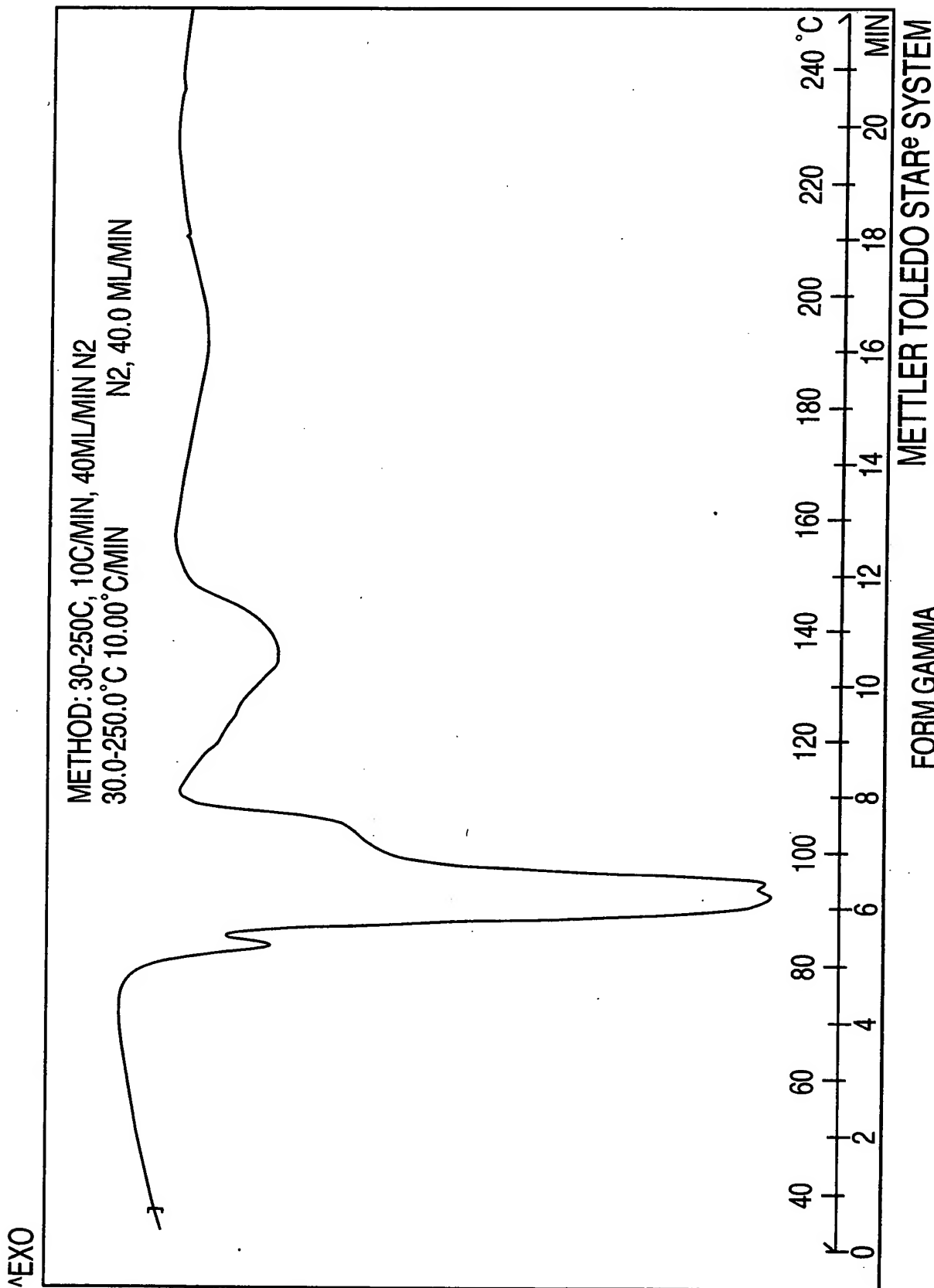


FIG. 60

61/64

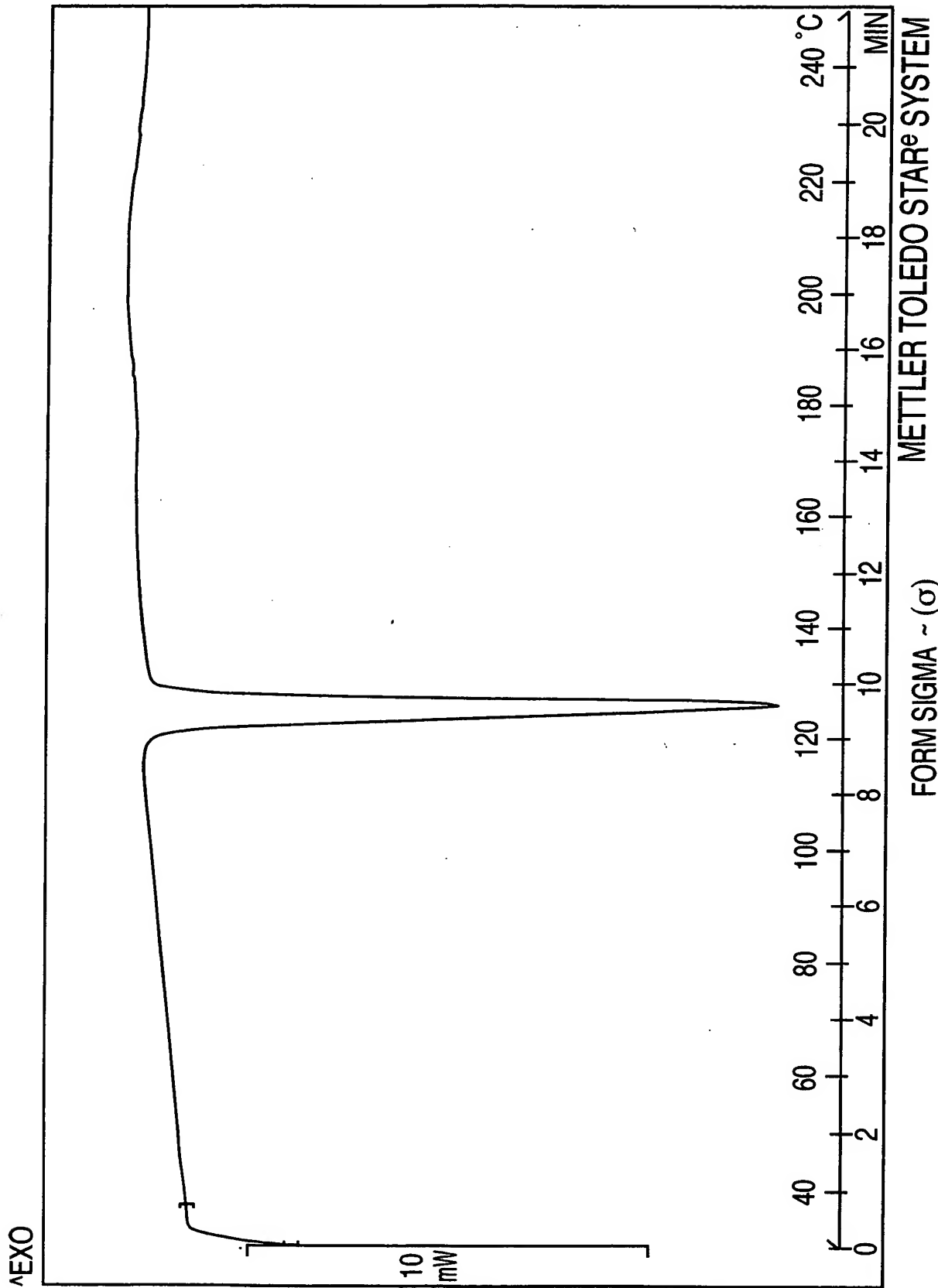


FIG. 61

62/64

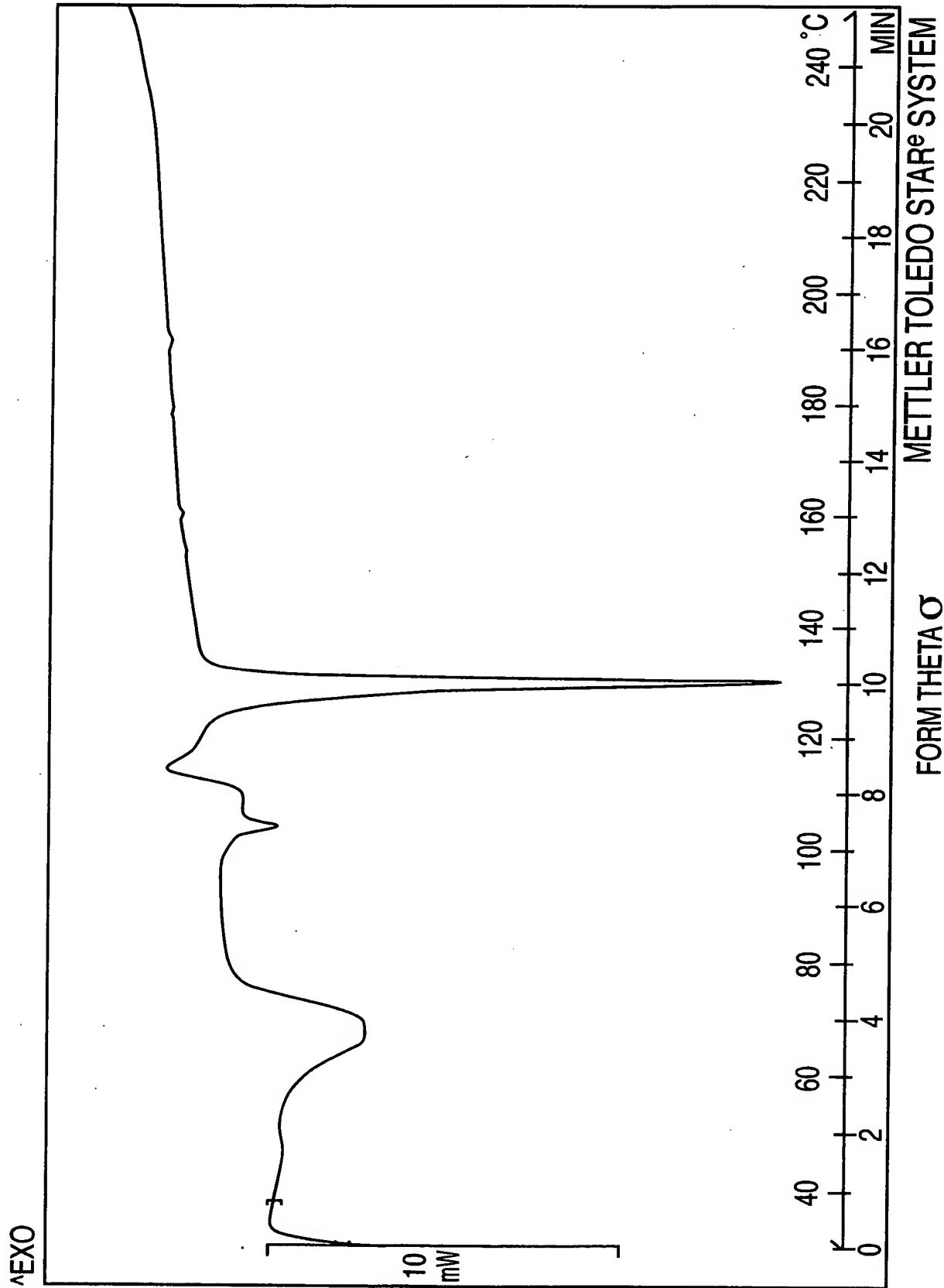


FIG. 62

63/64

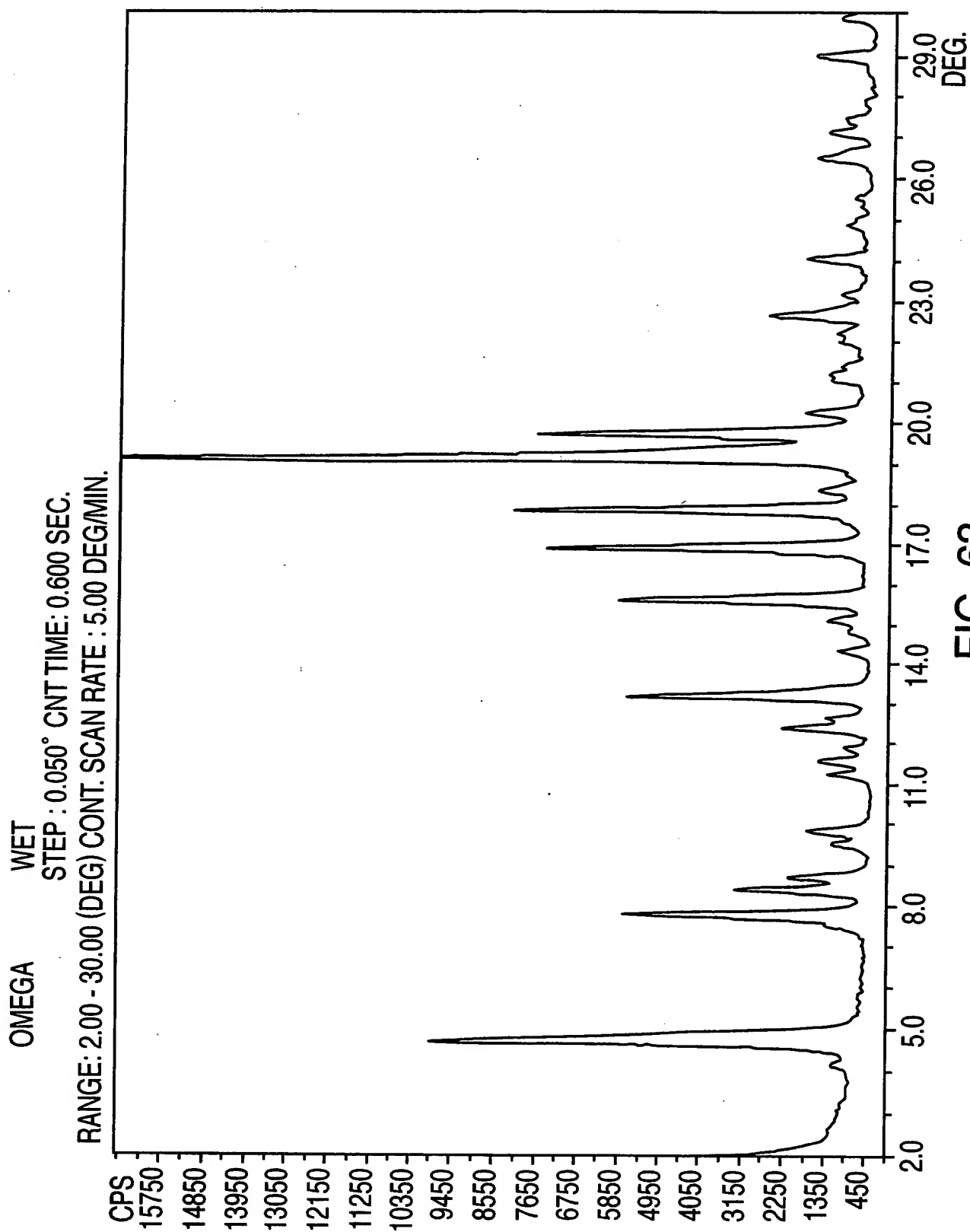


FIG. 63

Comparison between the impurity profile of Nateglinide crystallized in IPA-H₂O and Nateglinide in Methanol-H₂O

Sample No	Solvent	Impurity profile by RRT [% w/w]							
		D-PA (0.23)	(0.25)	(0.46)	(0.80)	Ipcha (0.89)	Dimer (1.38)	Methyl Ester (1.51)	Isopropyl Ester (2.3)
RL-2155/1	Methanol-H ₂ O	<0.01		0.02	<0.01	0.03	0.02	2.91	0.04
RL-2163/4	IPA-H ₂ O	<0.01	0.04		0.02	0.02	0.01		0.03
									0.02

Note: D-PA means D-Phenyl Alanine

Ipcha means Iso propyl cyclohexyl carboxylic acid

Both are the starting materials of the product

(-)-N-[(trans-4-isopropyl cyclohexane)carbonyl]-D-phenylalanine

FIG. 64